DAV-DX170/DX250

SERVICE MANUAL

US Model
Canadian Model

Ver. 1.0 2005.03

- DAV-DX170, 250 are composed of following models.
  As service manuals are issued for each component model, please refer to them.

COMPONENT MODEL NAME

	DAV-DX170	DAV-DX250
COMPACT DISCDECK RECEIVER	HCD-DX170	HCD-DX250
PACKAGE SPEAKER	SS-DS15	SS-DS14
FRONT SPEAKER	SS-TS31	SS-TS41
SURROUND SPEAKER	SS-TS31B	
CENTER SPEAKER	SS-CT31	
SUB SPEAKER	SS-WS32	

PARTS LIST

Part No.	Description	Remarks
	ACCESSORIES	
	**********	
1-479-223-11	COMMANDER, STANDARD (RM-ADU001) (INCLUDING BATTERY COVER)	
1-754-059-12	ANTENNA, LOOP (AM)	
1-754-147-41	ANTENNA (FM)	
1-769-108-11	CORD, CONNECTION (VIDEO)	
1-830-063-11	CORD (WITH CONNECTOR)(SPEAKER)	
2-590-791-11	MANUAL, INSTRUCTION (ENGLISH)	
2-590-791-21	MANUAL, INSTRUCTION (FRENCH)(CND)	
2-595-062-01	FOOT PAD (DX250)	
4-243-457-01	RUBBER (SPEAKER)(DX170)	

DVD HOME THEATRE SYSTEM

9-879-558-01
2005C16-1
© 2005.03

Sony Corporation
Audio Group
Published by Sony Engineering Corporation

SONY®

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2005.03	New

HCD-DX150/DX170/DX250

SERVICE MANUAL

Self Diagnosis Supported model

Ver. 1.5 2006.10

US Model
Canadian Model
HCD-DX150/DX170/DX250
E Model
Australian Model
HCD-DX150

HCD-DX150/DX170/DX250 are the amplifier, DVD/CD and tuner section in DAV-DX150/DX170/DX250.

Photo: HCD-DX150

This system incorporates with Dolby* Digital and Dolby Pro Logic (II) adaptive matrix surround decoder and the DTS** Digital Surround System.

* Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.

** Manufactured under license from Digital Theater Systems, Inc. "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc.

Model Name Using Similar Mechanism	NEW
Mechanism Type	CDM81C-DVBU101
Optical Pick-up Name	KHM-310CAB/C2NP

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS for the US model

POWER OUTPUT AND TOTAL HARMONIC DISTORTION: With 3 ohm loads, both channels driven, from 200 – 20,000 Hz; rated 55 watts per channel minimum RMS power, with no more than 0.7 % total harmonic distortion from 250 milli watts to rated output.

Amplifier section

DX150

North American model:
Surround mode (reference) music power output
Front: 133 W + 133 W (with SS-TS31)
Center*: 133 W (with SS-CT31)
Surround*: 133 W + 133 W (with SS-TS31B)
Subwoofer*: 135 W (with SS-WS31)

Central/South American models
Stereo mode (rated) 55 W + 55 W (DIN)
Surround mode (reference) music power output
Front: 120 W + 120 W
Center*: 120 W
Surround*: 120 W + 120 W
Subwoofer*: 120 W

Other models:
Stereo mode (rated) 55 W + 55 W (3 ohms at 1 kHz, DIN)
Surround mode (reference) music power output
Front: 133 W + 133 W (with SS-TS31)
Center*: 133 W (with SS-CT31)
Surround*: 133 W + 133 W (with SS-TS31B)
Subwoofer*: 135 W (with SS-WS31)

DX170

Surround mode (reference) music power output
Front: 143 W + 143 W (with SS-TS31)
Center*: 143 W (with SS-CT31)
Surround*: 143 W + 143 W (with SS-TS31B)
Subwoofer*: 285 W (with SS-WS32)

DX250

Surround mode (reference) music power output
Front: 143 W + 143 W (with SS-TS41)
Center*: 143 W (with SS-CT31)
Surround*: 143 W + 143 W (with SS-TS31B)
Subwoofer*: 285 W (with SS-WS32)

Depending on the sound field settings and the source, there may be no sound output.

Inputs
VIDEO/SAT (AUDIO IN) Sensitivity: 250/450 mV
Impedance: 50 kilohms
Phones Accepts low-and high-impedance headphones.

— Continued on next page —

DVD RECEIVER

9-879-398-06
2006J16-1
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Sony Corporation
Home Audio Division
Published by Sony Techno Create Corporation

SONY

DVD system

Laser	Semiconductor laser (DVD: λ = 650 nm) (CD: λ = 790 nm) Emission duration: continuous
Signal format system	
North American, Latin, and Mexican models:	
	NTSC
Other models:	NTSC/PAL
Frequency response (at 2 CH STEREO mode)	
	DVD (PCM): 2 Hz to 22 kHz (±1.0 dB) CD: 2 Hz to 20 kHz (±1.0 dB)

Tuner section

System	PLL quartz-locked digital synthesizer system
FM tuner section	
Tuning range	
North American models:	87.5 – 108.0 MHz (100 kHz step)
Other models:	87.5 – 108.0 MHz (50 kHz step)
Antenna (aerial)	FM wire antenna (aerial)
Antenna (aerial) terminals	75 ohms, unbalanced
Intermediate frequency	10.7 MHz
AM tuner section	
Tuning range	
North American, Latin, and Mexican models:	
	530 – 1,710 kHz (with the interval set at 10 kHz) 531 – 1,710 kHz (with the interval set at 9 kHz)
Middle eastern models:	531 – 1,602 kHz (with the interval set at 9 kHz)
Other models:	530 – 1,710 kHz (with the interval set at 10 kHz) 531 – 1,602 kHz (with the interval set at 9 kHz)
Antenna (aerial)	AM loop antenna (aerial)
Intermediate frequency	450 kHz

Video section

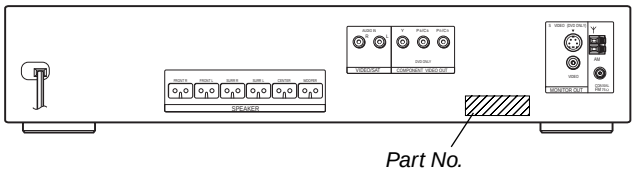
Outputs	Video: 1 Vp-p 75 ohms S video: Y: 1 Vp-p 75 ohms C: 0.286 Vp-p 75 ohms COMPONENT: Y: 1 Vp-p 75 ohms P_B/C_B, P_R/C_R: 0.7 Vp-p 75 ohms

General

Power requirements	
North American and Mexican models:	
	120 V AC, 60 Hz
Central/South American models:	
	110 – 240 V AC, 50/60 Hz
Other models:	220 – 240 V AC, 50/60 Hz
Power consumption	On: 145 W (DAV-DX150) On: 160 W (DAV-DX170/DX250) Standby: 0.3 W (at the Power Saving Mode)
Dimensions (approx.)	430 × 88 × 415 mm (17 × 3 1/2 × 16 3/8 inches) (w/h/d) incl. projecting parts
Mass (approx.)	4.9 kg (10 lb 13 oz) (DAV-DX150) 5.0 kg (11 lb 1 oz) (DAV-DX170/DX250)

Design and specifications are subject to change without notice.

MODEL IDENTIFICATION
– Rear Panel –



Model	Part No.
HCD-DX150 US	2-541-507-0□
HCD-DX150 CND	2-541-507-1□
HCD-DX150 AUS	2-541-507-2□
HCD-DX150 MX	2-541-507-3□
HCD-DX150 EA	2-541-507-4□
HCD-DX150 E32	2-541-507-5□
HCD-DX150 SP	2-541-507-6□
HCD-DX170 US	2-588-786-0□
HCD-DX170 CND	2-588-786-1□
HCD-DX250 US	2-588-786-2□
HCD-DX250 CND	2-588-786-3□

- Abbreviation
  AUS : Australian model.
  CND : Canadian model.
  E32 : 110 – 240 V AC Area in E model.
  EA : Saudi Arabia model.
  MX : Mexican model.
  SP : Singapore model.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscou-s (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage.
Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

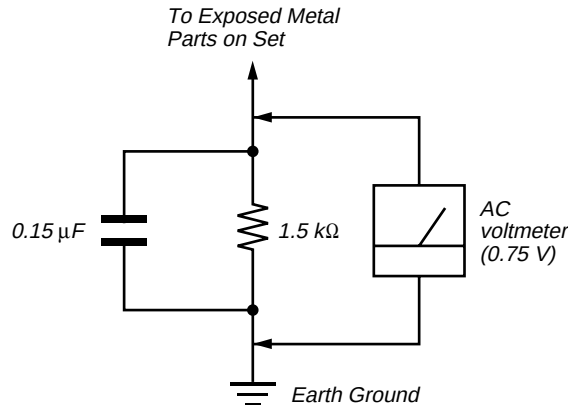


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COM- POSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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SECTION 1
SERVICING NOTE

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the "S curve check" in "CD section adjustment" and check that the S curve waveform is output several times.

DISC SLOT LOCK

The disc slot lock function for the antitheft of an demonstration disc in the store is equipped.

Setting Procedure :

1. Press the I/⏻ button to turn the set on.
2. Press the FUNCTION button to set DVD function.
3. Insert a disc.
4. Press the ■ stick and the ⏏ button simultaneously for five seconds.
5. The message "LOCKED" is displayed and the slot is locked.

Releasing Procedure :

1. Press the ■ stick and the ⏏ button simultaneously for five seconds again.
2. The message "UNLOCKED" is displayed and the slot is unlocked.

Note: When "LOCKED" is displayed, the slot lock is not released by turning power on/off with the I/⏻ button.

Note 1: Regarding the notification symbol "R"
Because the number of the operating buttons of this product are limited, some operations require use of the operating buttons of the remote commander, When a specific operation requires use of the operating buttons of the remote commander, "R" is added to the specific operating procedure in this manual.
Example MENU/NO "R" The MENU/NO button of remote commander.

Note 2: Incorrect operations may be performed if the test mode ia not entered properly.
In this case, press the I/⏻ button to turn the power off, and retry to enter the test mode.

Note 3: If the disc tray does not open and the message "LOCKED" appears, press the ■ tick and the ⏏ button simultaneously for 5 seconds or longer.
Then remove your fingers from the above stick and the button.
The message "UNLOCKED" appears for 2 seconds and the disc tray opens.

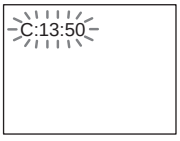
Note on DMB10 board or DMB11 board replacement

New part of EEP ROM (IC103) on the DMB10 board or DMB11 board cannot be used. Therefore, if the mounted DMB10 board (A-1088-070-A, etc.) is replaced, exchange new EEP ROM (IC103) with that used before the replacement.

Self-diagnosis Function

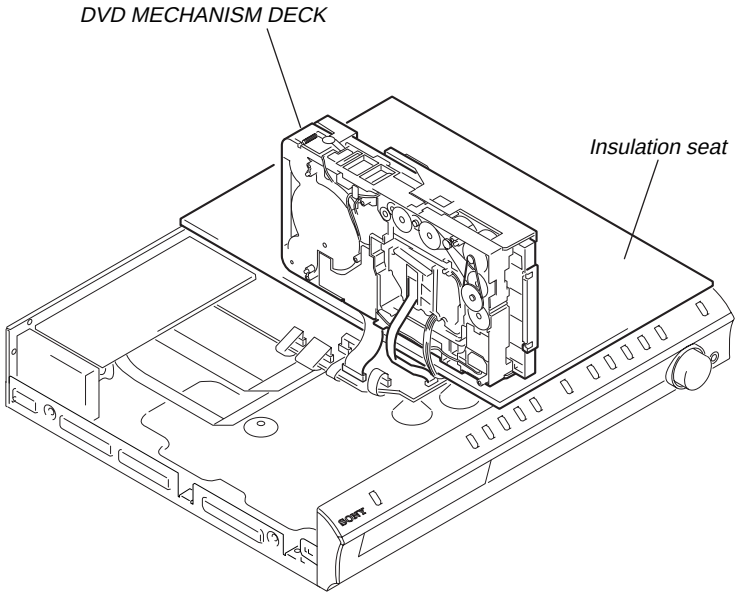
(When letters/numbers appear in the display)

When the self-diagnosis function is activated to prevent the system from malfunctioning, a 5-character service number (e.g., C 13 50) with a combination of a letter and 4 digits appears on the screen and the front panel display. In this case, check the following table.

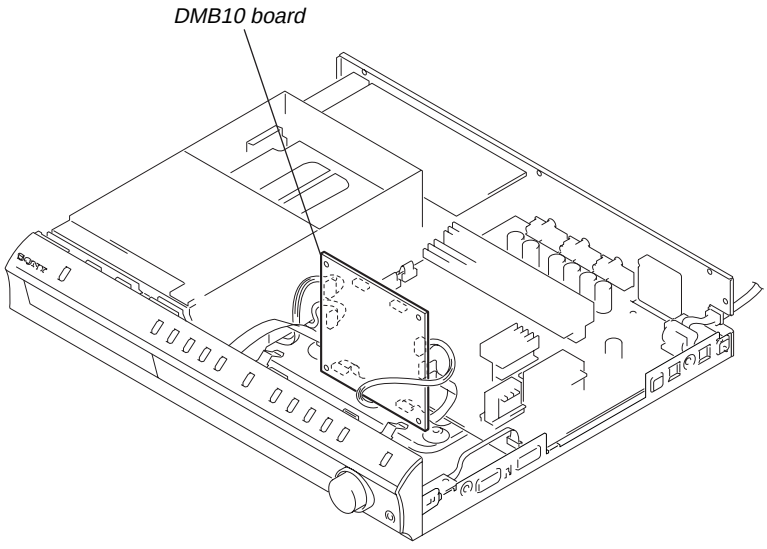


First 3 characters of the service number	Cause and/or corrective action
C 13	The disc is dirty. ➡Clean the disc with a soft cloth (page 80).
C 31	The disc is not inserted correctly. ➡Restart the system, then re-insert the disc correctly.
E XX (xx is a number)	To prevent a malfunction, the system has performed the self-diagnosis function. ➡Contact your nearest Sony dealer or local authorized Sony service facility and give the 5-character service number. Example: E 61 10

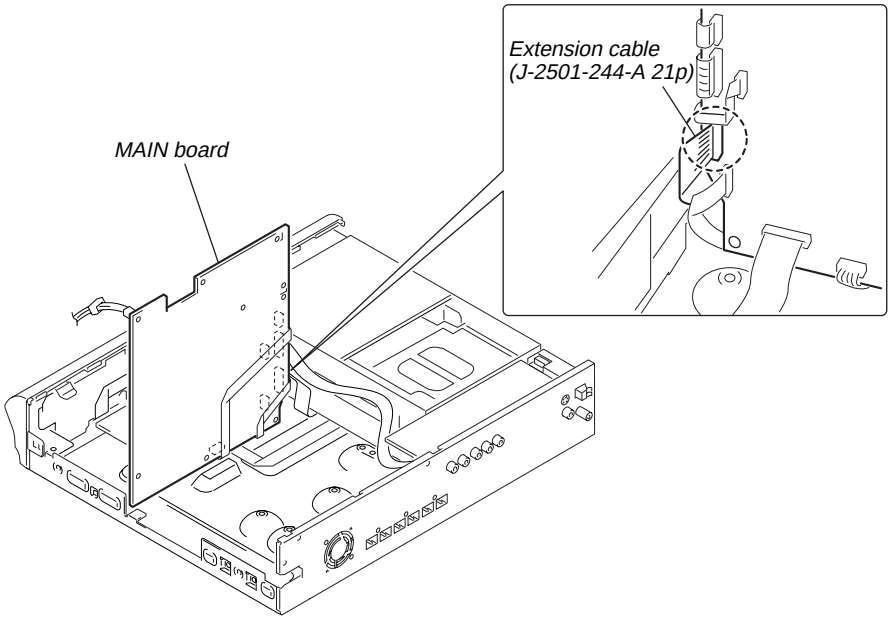
• SERVICE POSITION-1 (DVD MECHANISM DECK)



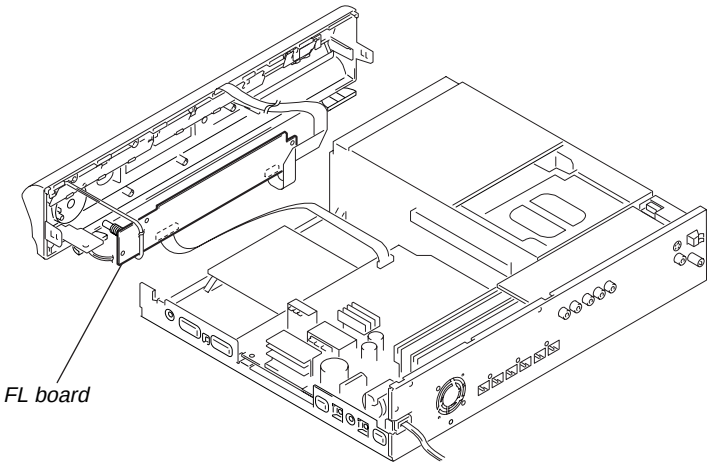
• SERVICE POSITION-2 (DMB10 BOARD)



• SERVICE POSITION-3 (MAIN BOARD)



• SERVICE POSITION-4 (FL BOARD)



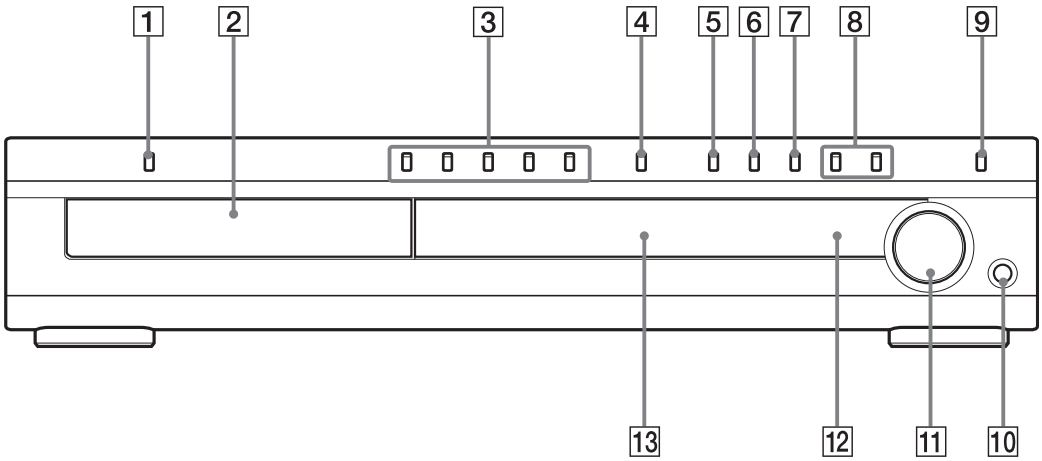
SECTION 2
GENERAL

This section is extracted from instruction manual.

Index to Parts and Controls

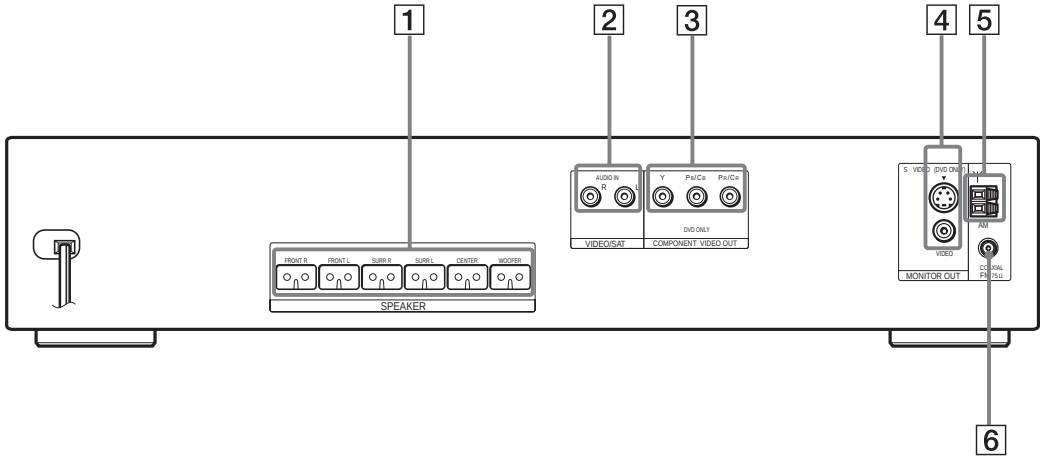
For more information, refer to the pages indicated in parentheses.

Front panel



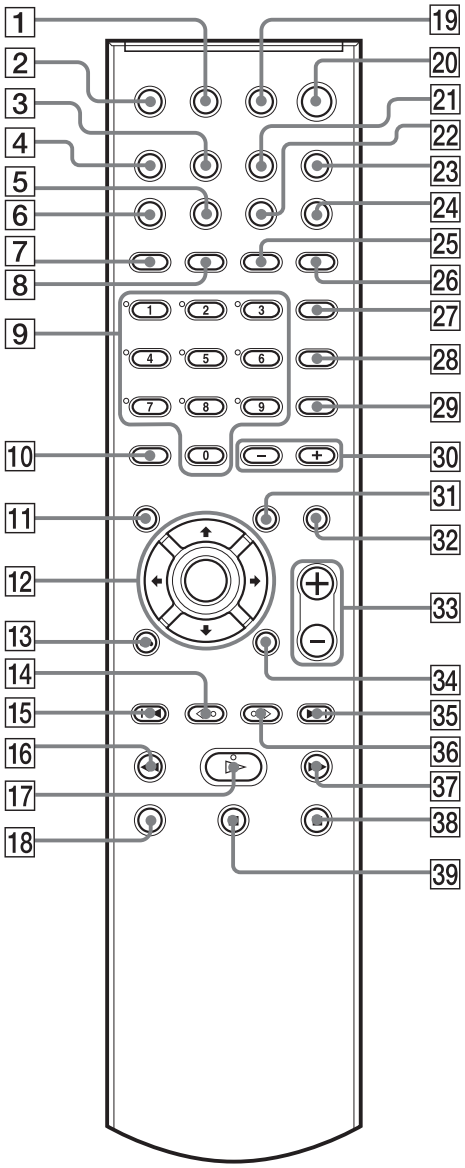
1 **I/⏻ (on/standby) (25, 29, 70)**
2 **Disc tray (29)**
3 **DISC 1-5 (29)**
4 **⏏ (open/close) (29, 70)**
5 **▷ (play) (29)**
6 **❚❚ (pause) (30)**
7 **■ (stop) (30, 70)**
8 **⏮/⏭ (30)**
9 **FUNCTION (29)**
10 **PHONES jack (29)**
11 **VOLUME (29)**
12 **(remote sensor) (12)**
13 **Front panel display (91)**

Rear panel



1 **SPEAKER jacks (14)**
2 **VIDEO/SAT AUDIO IN jacks (21, 23)**
3 **COMPONENT VIDEO OUT jacks (19)**
4 **MONITOR OUT (VIDEO / S VIDEO) jacks (19)**
5 **AM terminal (18)**
6 **FM 75 COAXIAL jack (18)**

Remote



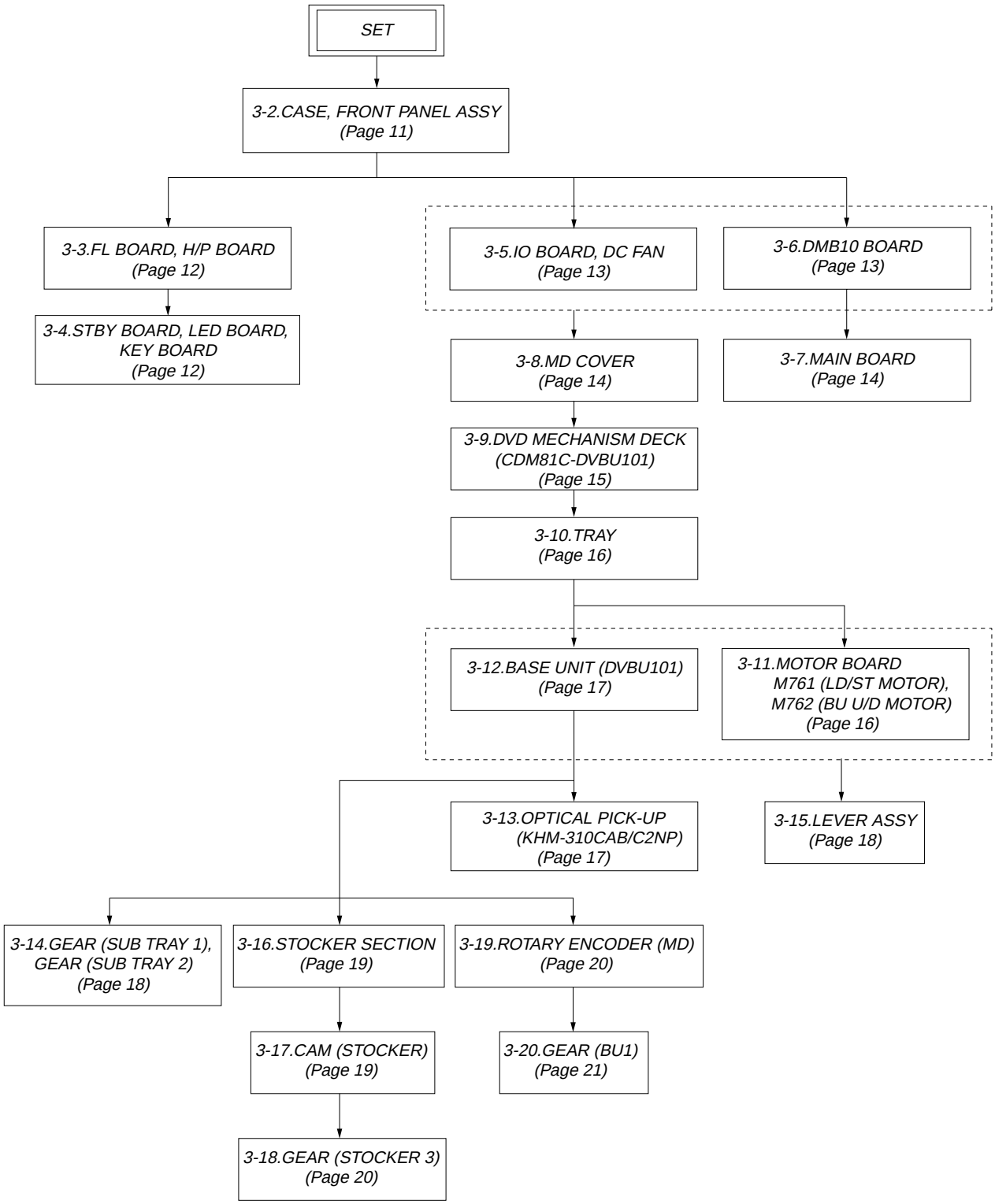
1 **TV I/⏻ (on/standby) (64)**
2 **TV/VIDEO (64)**
3 **TUNER MENU (67)**
4 **SLEEP (69)**
5 **DISC SKIP (29)**
6 **PROGRESSIVE (20)**
7 **REPEAT/FM MODE (33, 68)**
8 **TUNER/BAND (68)**
9 **Number buttons (34, 60, 64)**
The number 5 button has a tactile dot.*
10 **CLEAR, -/-- (26, 31, 65)**
11 **TOP MENU (34)**
12 **←/↑/↓/→/ENTER (25, 31, 55, 60, 66, 70, 71)**
13 **RETURN (35)**
14 **⏮/◀II REPLAY, STEP (30)**
15 **I◀◀ PRESET –, TV CH – (26, 30, 64, 68)**
16 **◀◀/◀I SLOW, TUNING – (45, 67)**
17 **▷ (play) (29)**
The ▷ button has a tactile dot.*
18 **TV (64)**
19 **THEATRE SYNC (65)**
20 **I/⏻ (on/standby) (25, 29, 68)**
21 **AMP MENU (25, 66, 70)**
22 **DSGX (58)**
23 **FUNCTION (20, 29, 57, 66)**
24 **SOUND FIELD (55)**
25 **DISPLAY (68)**
26 **PICTURE NAVI (39)**
27 **AUDIO (53)**
28 **SUBTITLE (59)**
29 **ANGLE (59)**
30 **ALBUM –/+ (30, 65)**
31 **MENU (34)**
32 **MUTING (30)**
33 **VOLUME, TV VOL +/– (29, 64, 68)**
The VOLUME, TV VOL + button has a tactile dot.*
34 **DISPLAY (9, 26, 31, 60, 71)**
35 **▶▶I PRESET +, TV CH + (26, 30, 64, 68)**
36 **⏭/II▶ ADVANCE, STEP (30)**
37 **▶▶/I▶ SLOW, TUNING + (45, 67)**
38 **■ (stop) (30, 60, 68)**
39 **II (pause) (30)**
The II button has a tactile dot.*

* Use the tactile dot as a reference when operating the system.

SECTION 3
DISASSEMBLY

3-1. DISASSEMBLY FLOW

- This set can be disassembled in the order shown below.
- The dotted square with arrow (⬚┄) prompts you to move to the next job when all of the works within the dotted square (⬚) are completed.


SET
3-2.CASE, FRONT PANEL ASSY (Page 11)
3-3.FL BOARD, H/P BOARD (Page 12)
3-4.STBY BOARD, LED BOARD, KEY BOARD (Page 12)
3-5.IO BOARD, DC FAN (Page 13)
3-6.DMB10 BOARD (Page 13)
3-8.MD COVER (Page 14)
3-7.MAIN BOARD (Page 14)
3-9.DVD MECHANISM DECK (CDM81C-DVBU101) (Page 15)
3-10.TRAY (Page 16)
3-12.BASE UNIT (DVBU101) (Page 17)
3-11.MOTOR BOARD M761 (LD/ST MOTOR), M762 (BU U/D MOTOR) (Page 16)
3-13.OPTICAL PICK-UP (KHM-310CAB/C2NP) (Page 17)
3-15.LEVER ASSY (Page 18)
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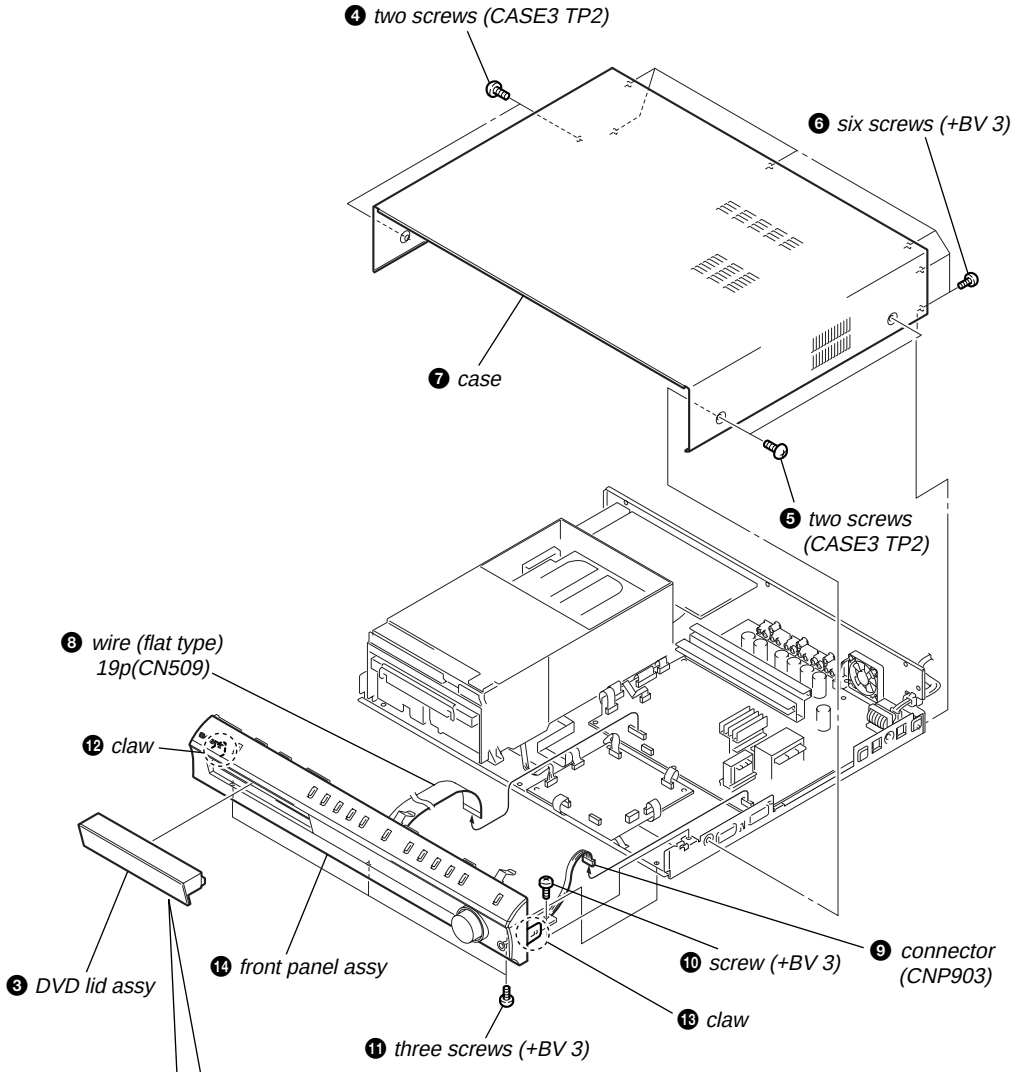
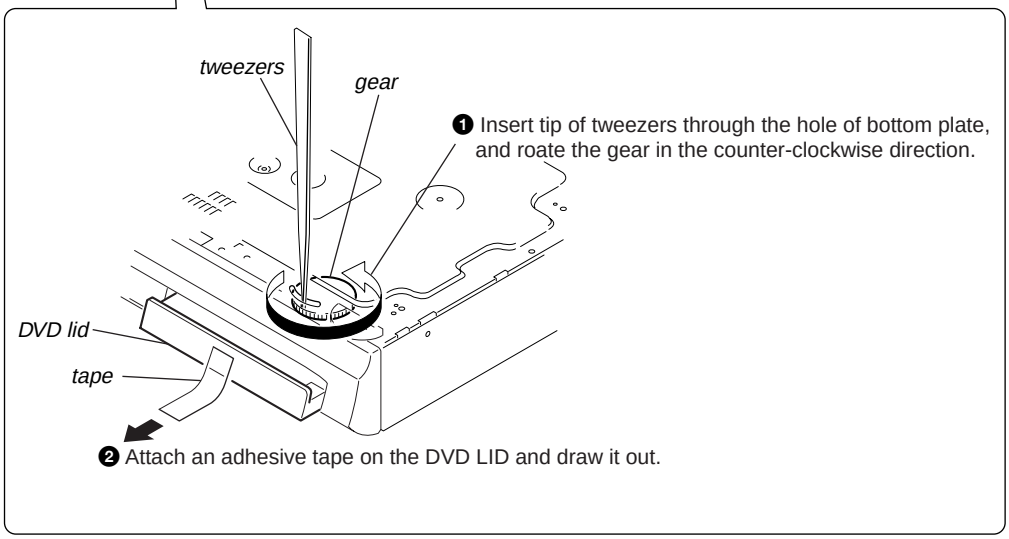
3-16.STOCKER SECTION (Page 19)
3-19.ROTARY ENCODER (MD) (Page 20)
3-17.CAM (STOCKER) (Page 19)
3-20.GEAR (BU1) (Page 21)
3-18.GEAR (STOCKER 3) (Page 20)

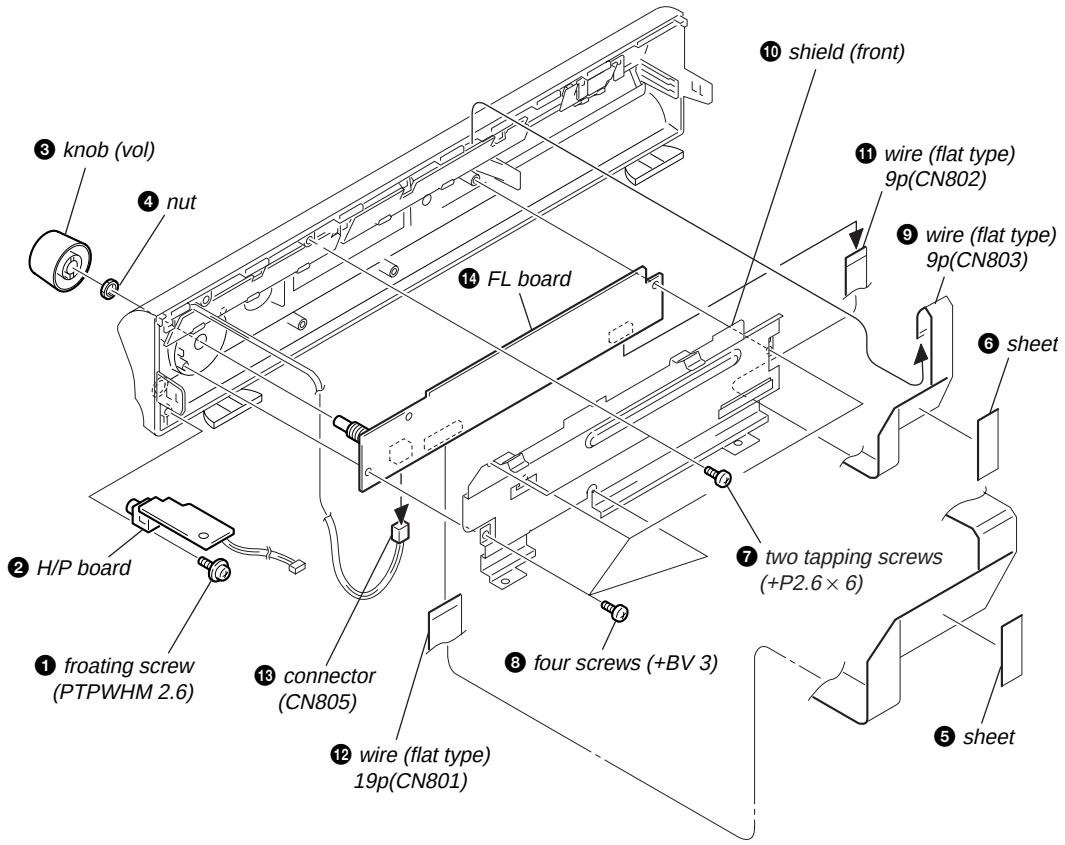
Note: Follow the disassembly procedure in the numerical order given.

3-2. CASE, FRONT PANEL ASSY

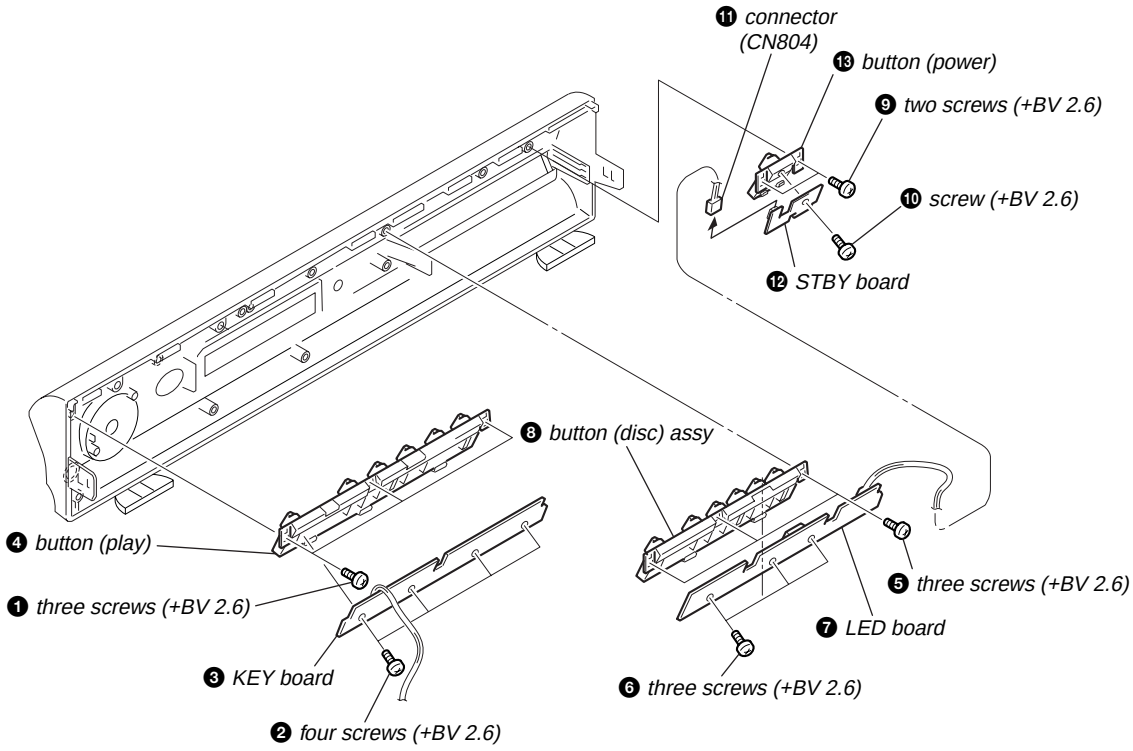



tweezers
gear
❶ Insert tip of tweezers through the hole of bottom plate, and roate the gear in the counter-clockwise direction.
DVD lid
tape
❷ Attach an adhesive tape on the DVD LID and draw it out.

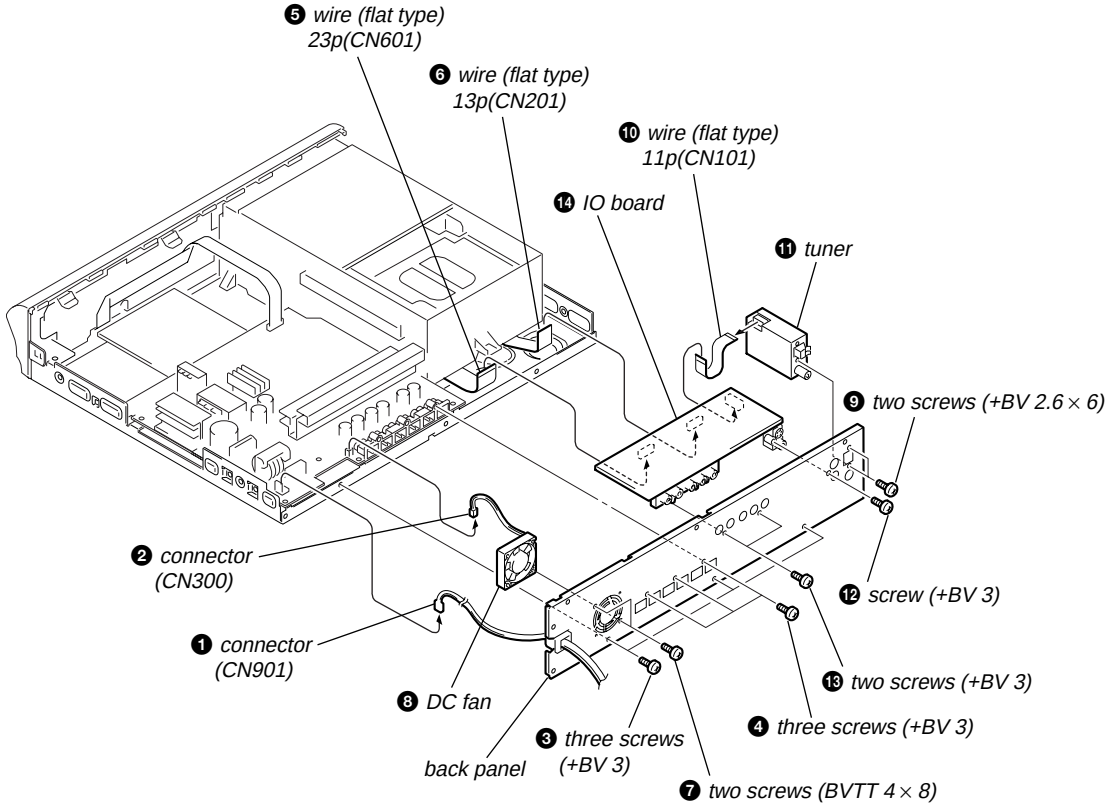
3-3. FL BOARD, H/P BOARD



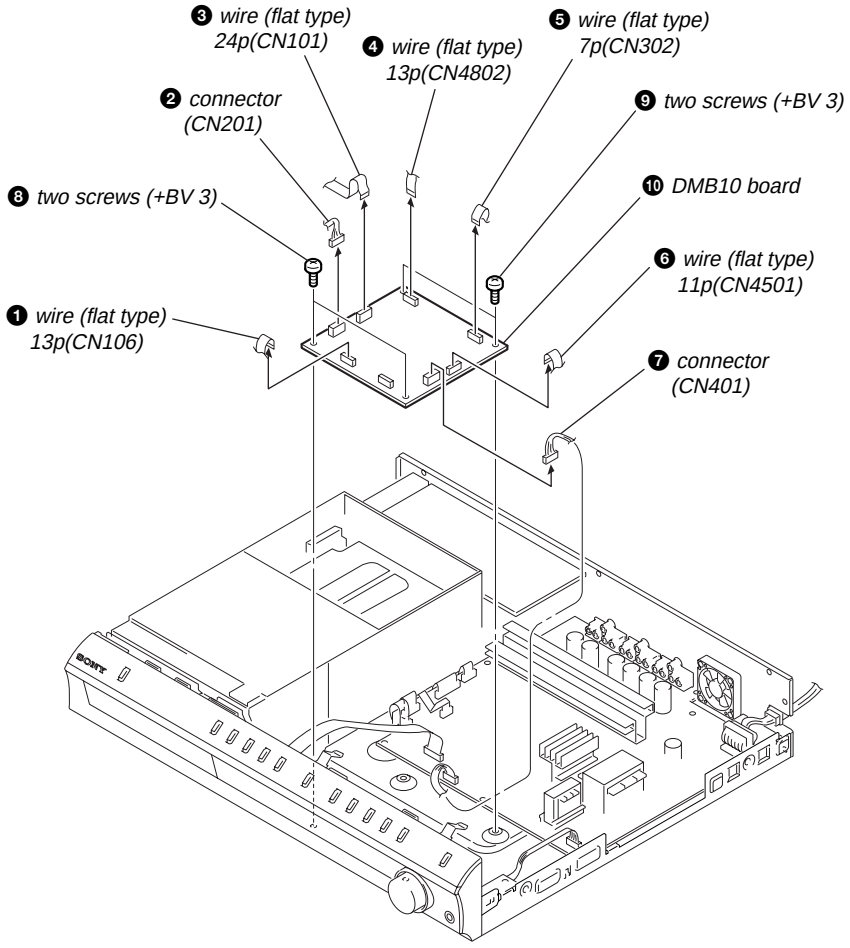
3-4. STBY BOARD, LED BOARD, KEY BOARD



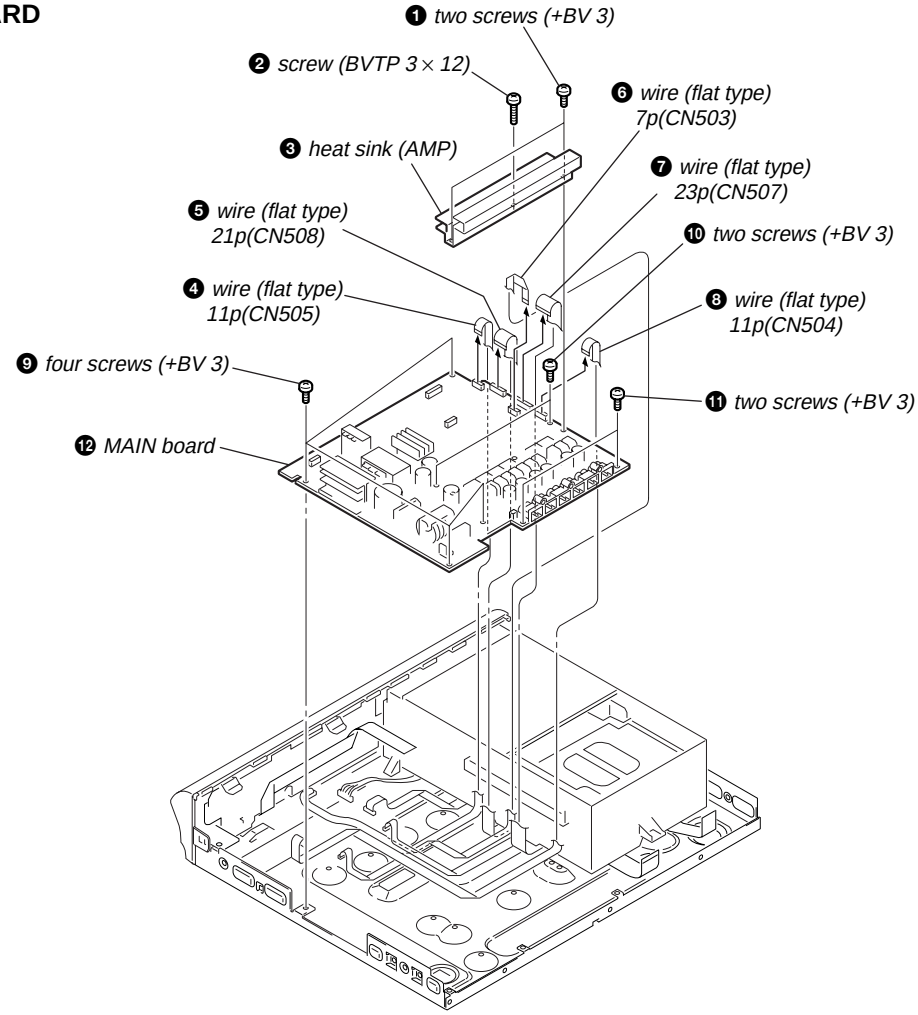
3-5. IO BOARD, DC FAN


❺ wire (flat type) 23p(CN601)
❻ wire (flat type) 13p(CN201)
❿ wire (flat type) 11p(CN101)
⓮ IO board
⓫ tuner
❾ two screws (+BV 2.6 × 6)
❷ connector (CN300)
⓬ screw (+BV 3)
❶ connector (CN901)
⓭ two screws (+BV 3)
❽ DC fan
❹ three screws (+BV 3)
❸ three screws (+BV 3)
back panel
❼ two screws (BVTT 4 × 8)

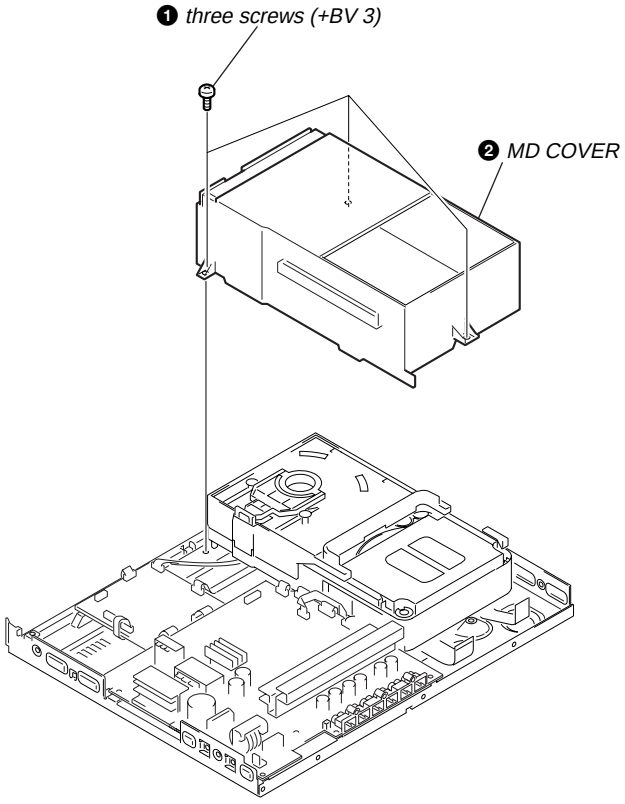
3-6. DMB10 BOARD


❸ wire (flat type) 24p(CN101)
❹ wire (flat type) 13p(CN4802)
❺ wire (flat type) 7p(CN302)
❷ connector (CN201)
❾ two screws (+BV 3)
❽ two screws (+BV 3)
❿ DMB10 board
❻ wire (flat type) 11p(CN4501)
❶ wire (flat type) 13p(CN106)
❼ connector (CN401)

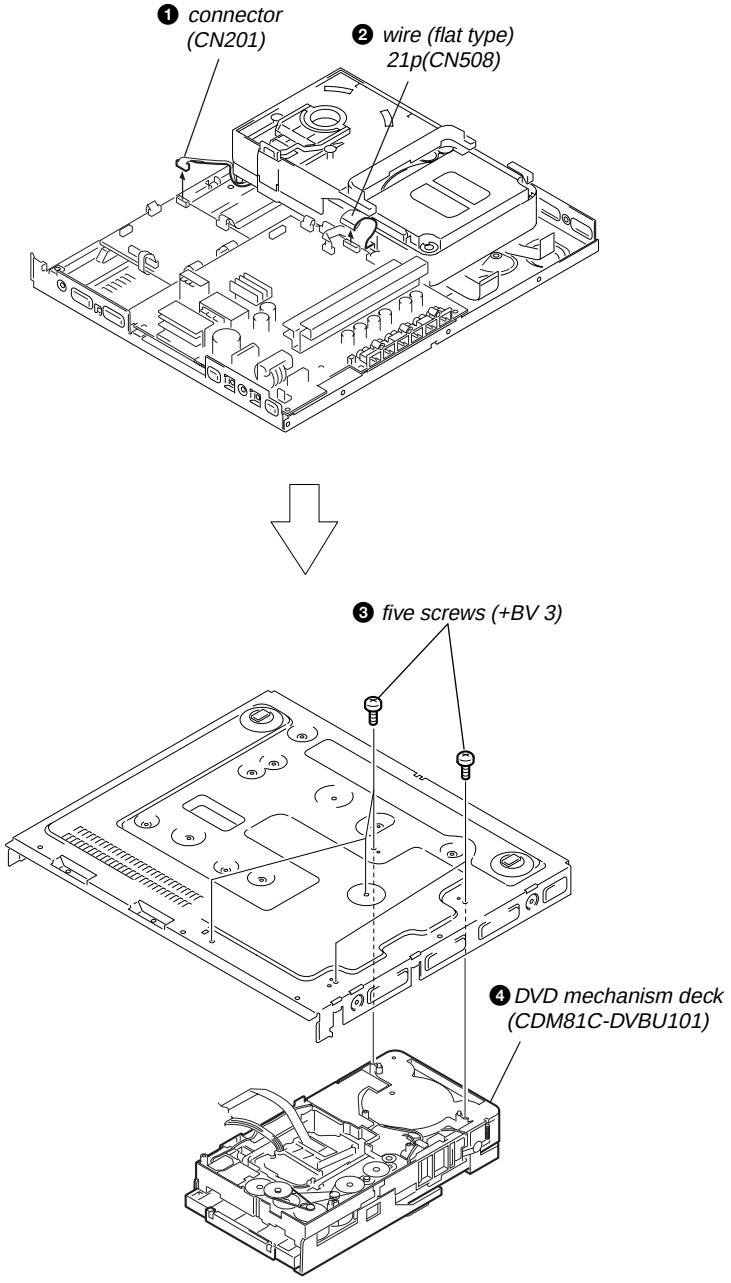
3-7. MAIN BOARD


❶ two screws (+BV 3)
❷ screw (BVTP 3 × 12)
❸ heat sink (AMP)
❹ wire (flat type) 11p(CN505)
❺ wire (flat type) 21p(CN508)
❻ wire (flat type) 7p(CN503)
❼ wire (flat type) 23p(CN507)
❽ wire (flat type) 11p(CN504)
❾ four screws (+BV 3)
❿ two screws (+BV 3)
⓫ two screws (+BV 3)
⓬ MAIN board

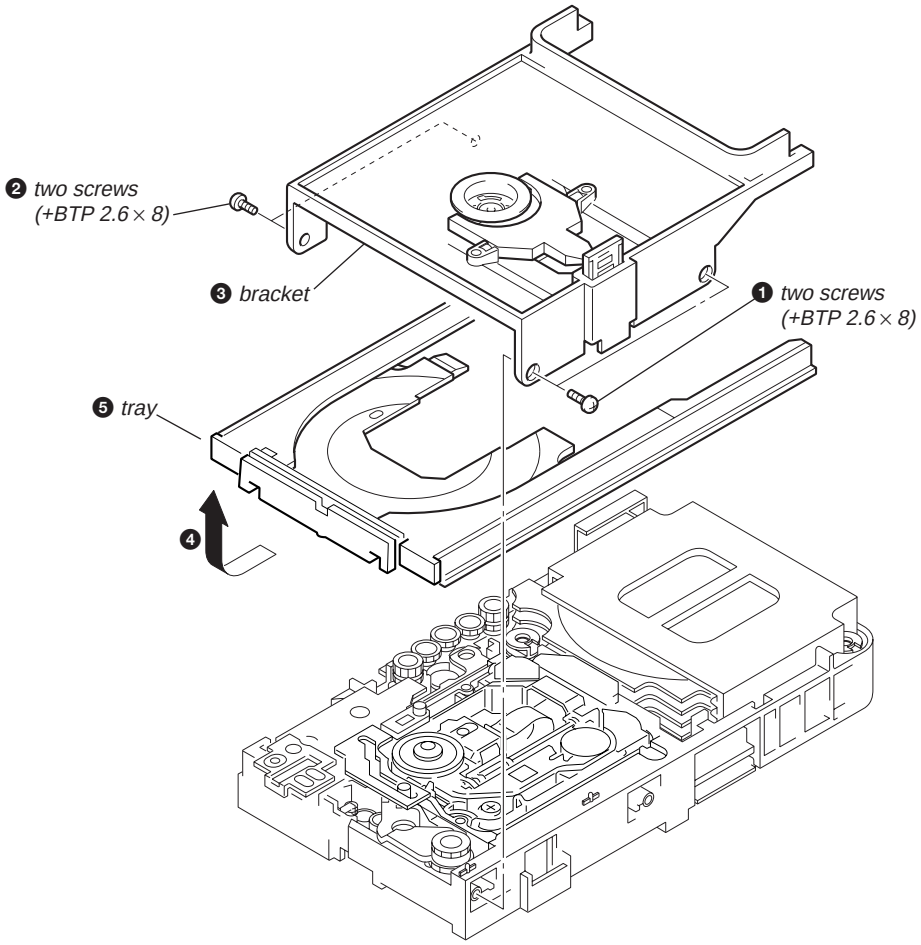
3-8. MD COVER



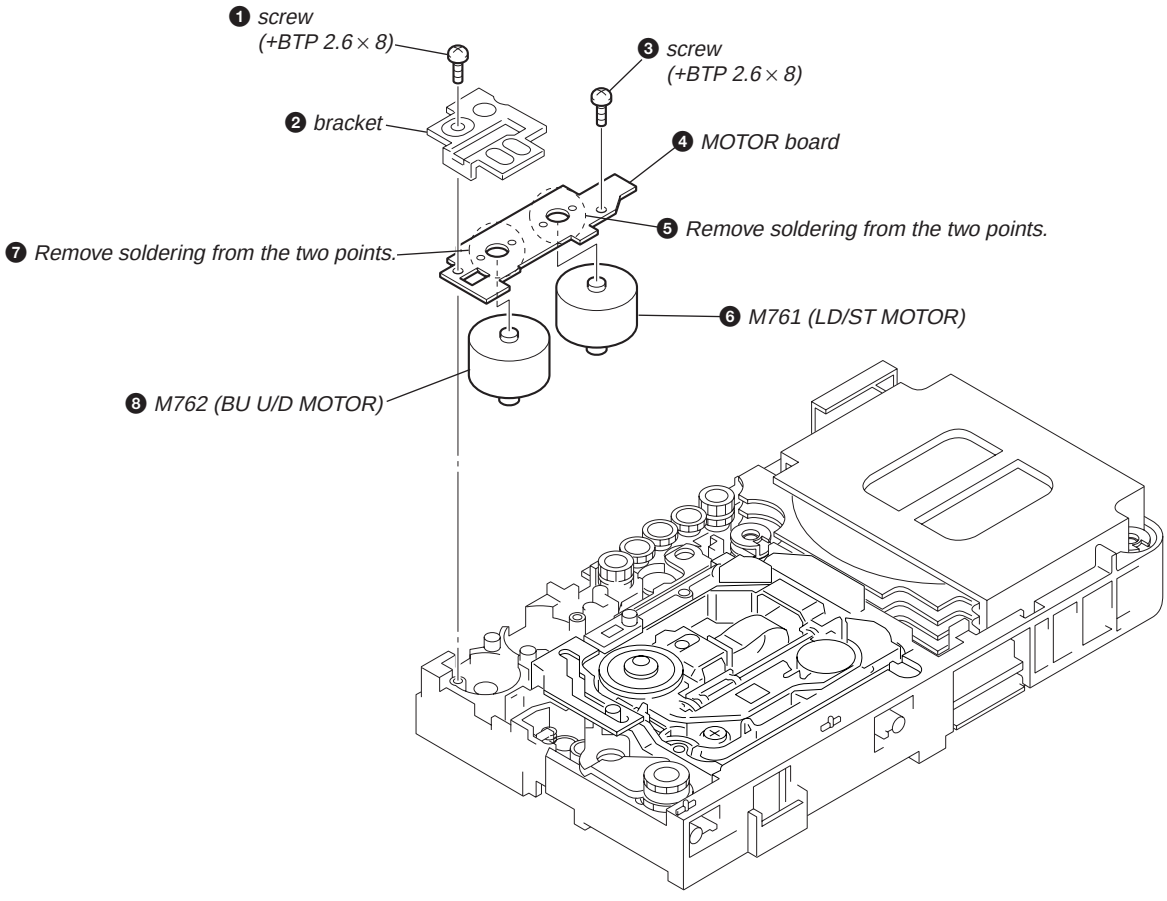
3-9. DVD MECHANISM DECK (CDM81C-DVBU101)



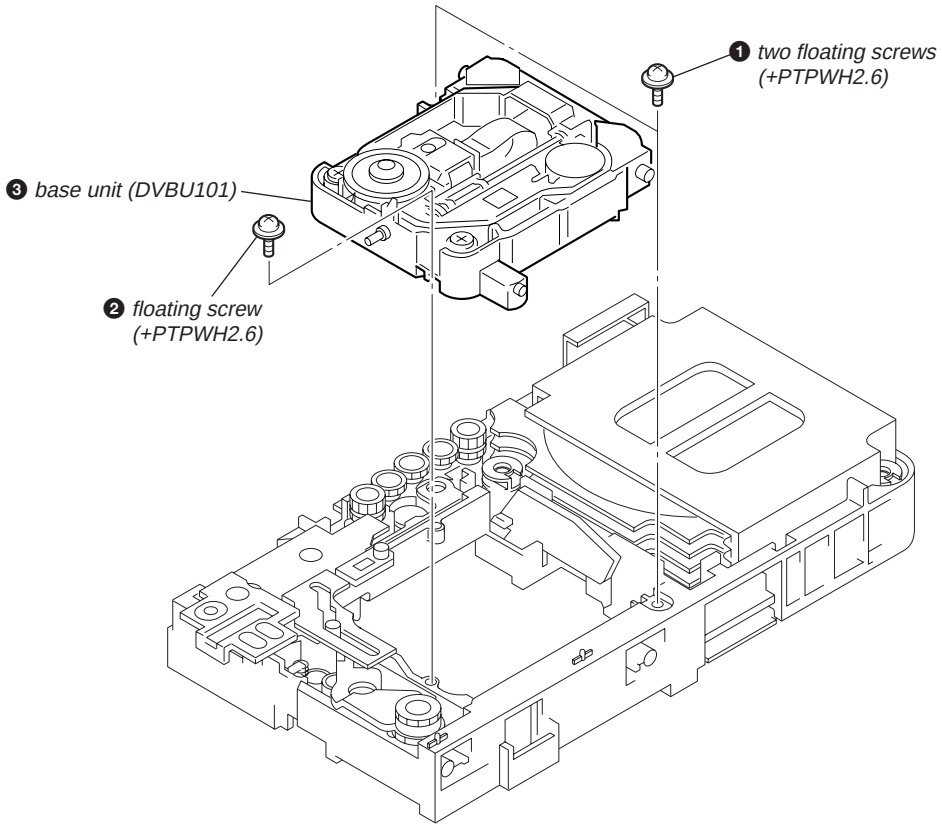
3-10. TRAY



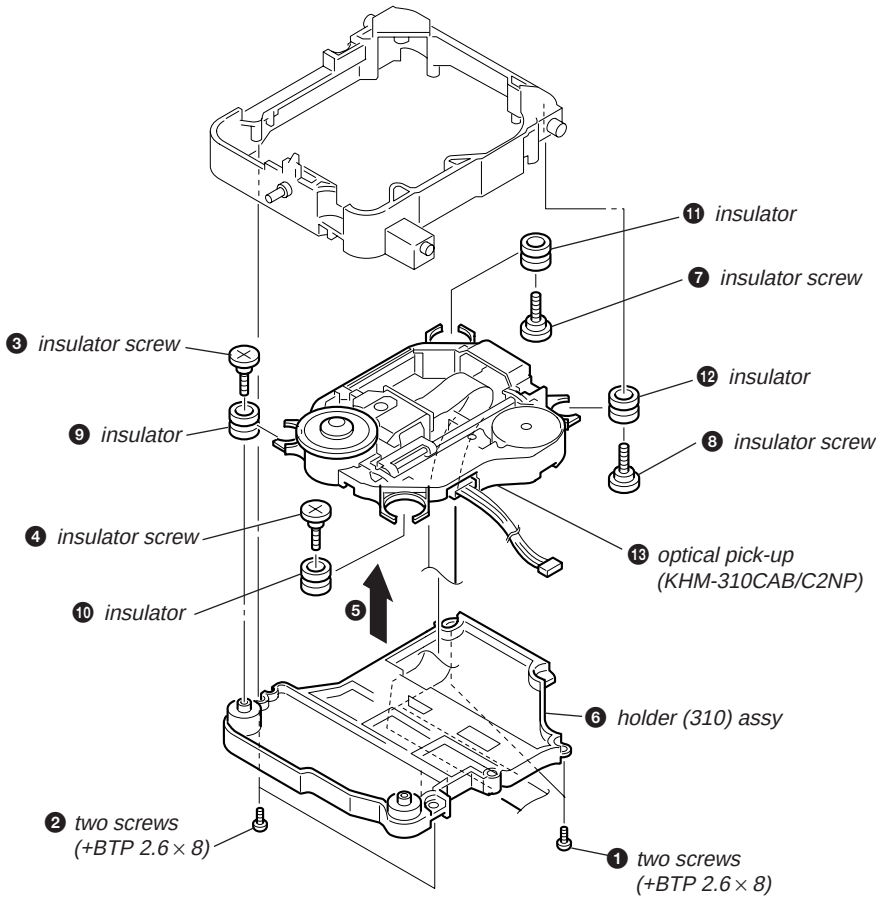
3-11. MOTOR BOARD, M761 (LD/ST MOTOR), M762 (BU U/D MOTOR)


❶ screw
(+BTP 2.6 × 8)
❸ screw
(+BTP 2.6 × 8)
❷ bracket
❹ MOTOR board
❺ Remove soldering from the two points.
❼ Remove soldering from the two points.
❻ M761 (LD/ST MOTOR)
❽ M762 (BU U/D MOTOR)

3-12. BASE UNIT (DVBU101)

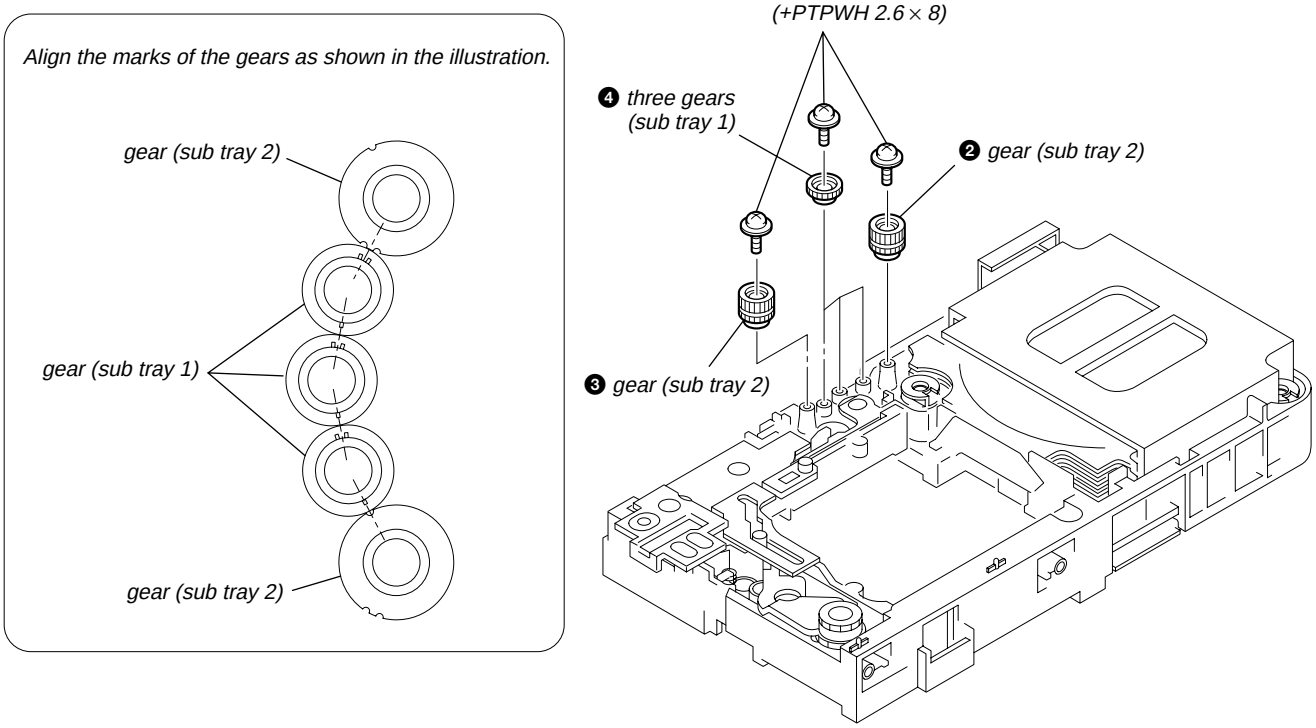


3-13. OPTICAL PICK-UP (KHM-310CAB/C2NP)

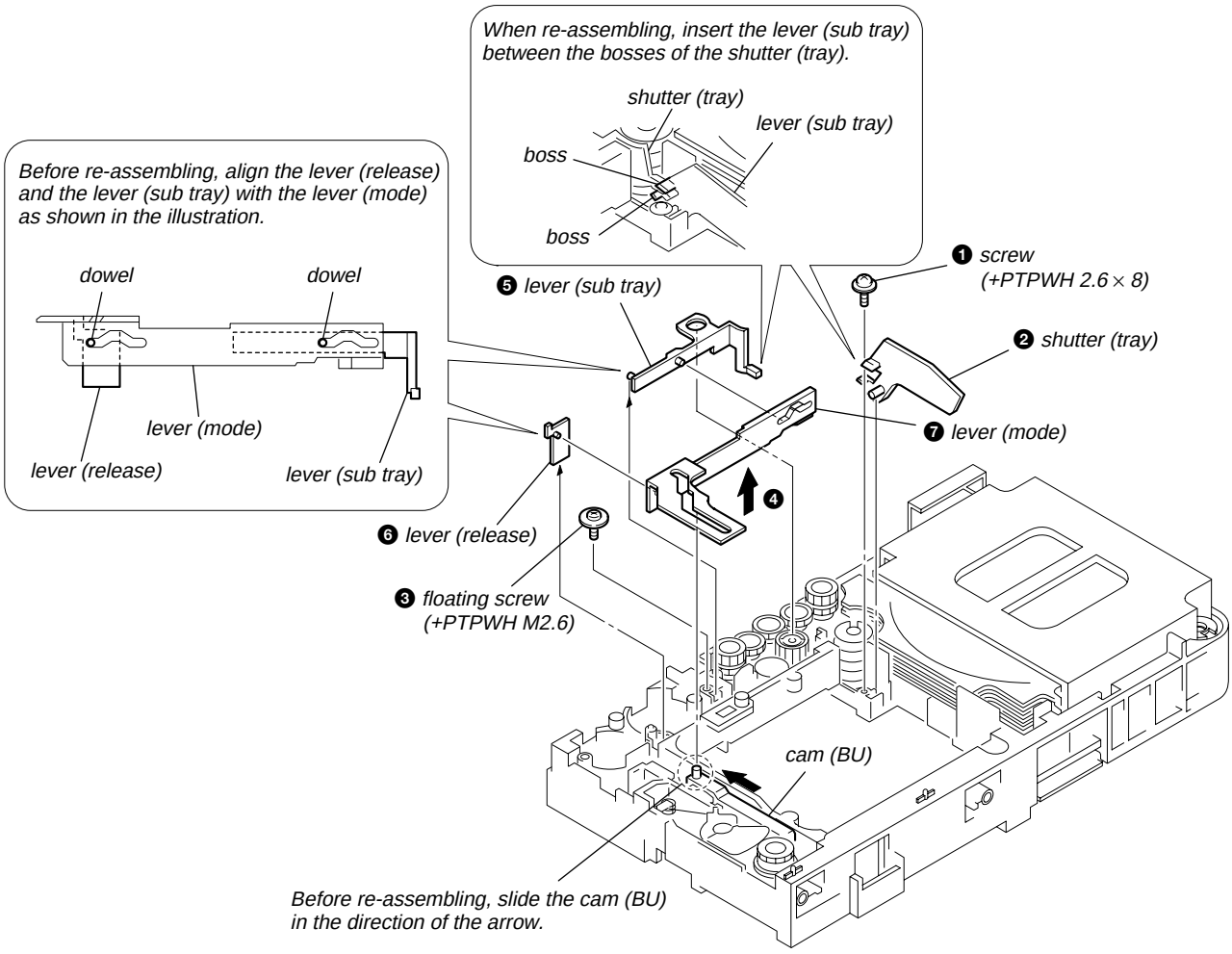


3-14. GEAR (SUB TRAY 1), GEAR (SUB TRAY 2)

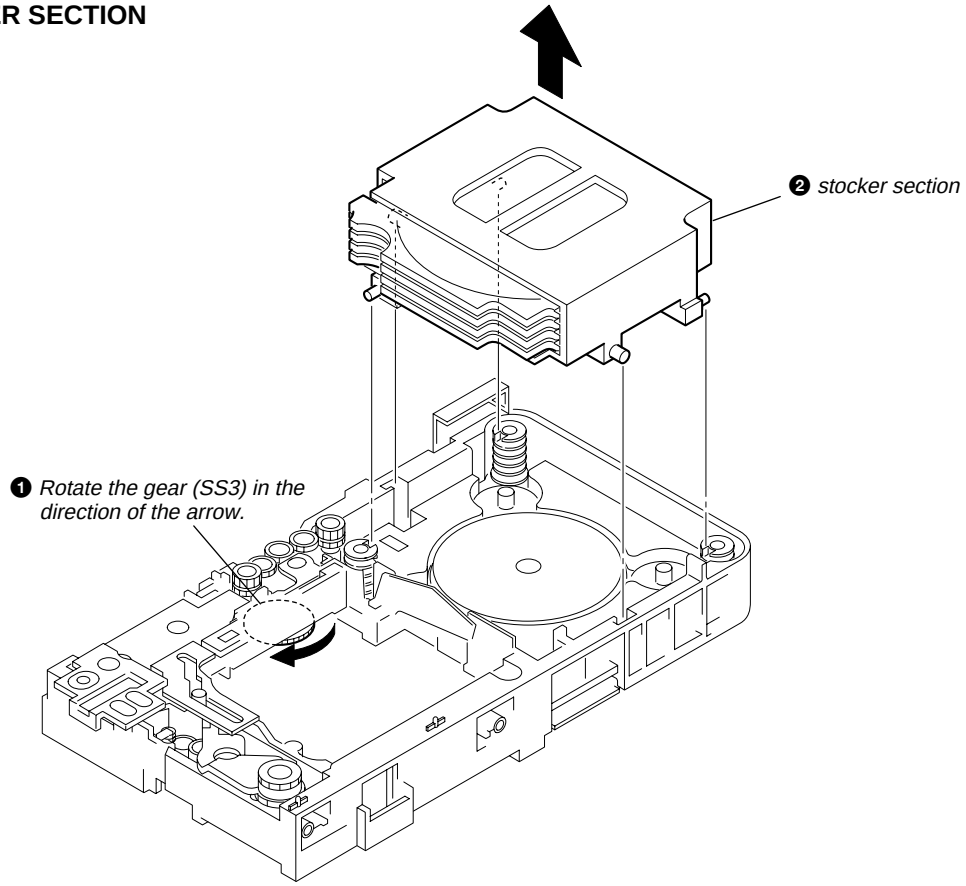
PRECAUTION DURING GEAR (SUB TRAY 1/2) INSTALLATION


Align the marks of the gears as shown in the illustration.
gear (sub tray 2)
gear (sub tray 1)
gear (sub tray 2)
❶ five screws (+PTPWH 2.6 × 8)
❹ three gears (sub tray 1)
❷ gear (sub tray 2)
❸ gear (sub tray 2)

3-15. LEVER ASSY


When re-assembling, insert the lever (sub tray) between the bosses of the shutter (tray).
shutter (tray)
lever (sub tray)
boss
boss
Before re-assembling, align the lever (release) and the lever (sub tray) with the lever (mode) as shown in the illustration.
dowel
dowel
lever (mode)
lever (release)
lever (sub tray)
❶ screw (+PTPWH 2.6 × 8)
❺ lever (sub tray)
❷ shutter (tray)
❼ lever (mode)
❹
❻ lever (release)
❸ floating screw (+PTPWH M2.6)
cam (BU)
Before re-assembling, slide the cam (BU) in the direction of the arrow.

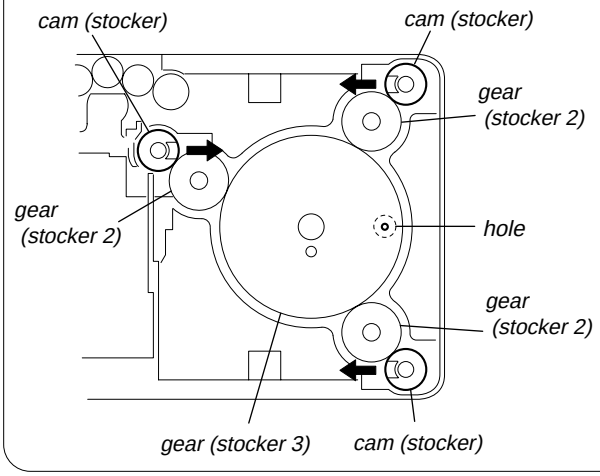
3-16. STOCKER SECTION

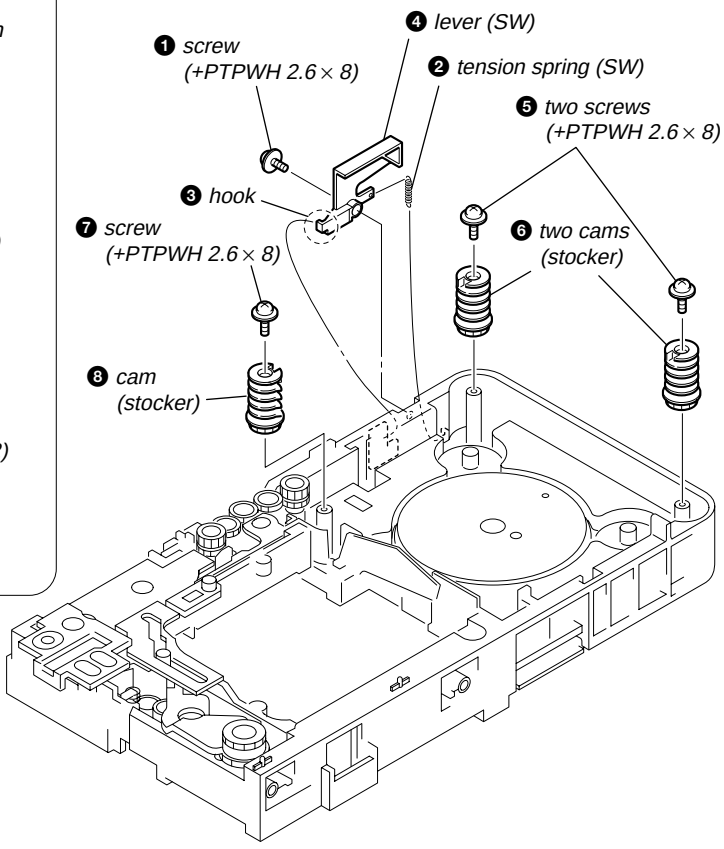


3-17. CAM (STOCKER)

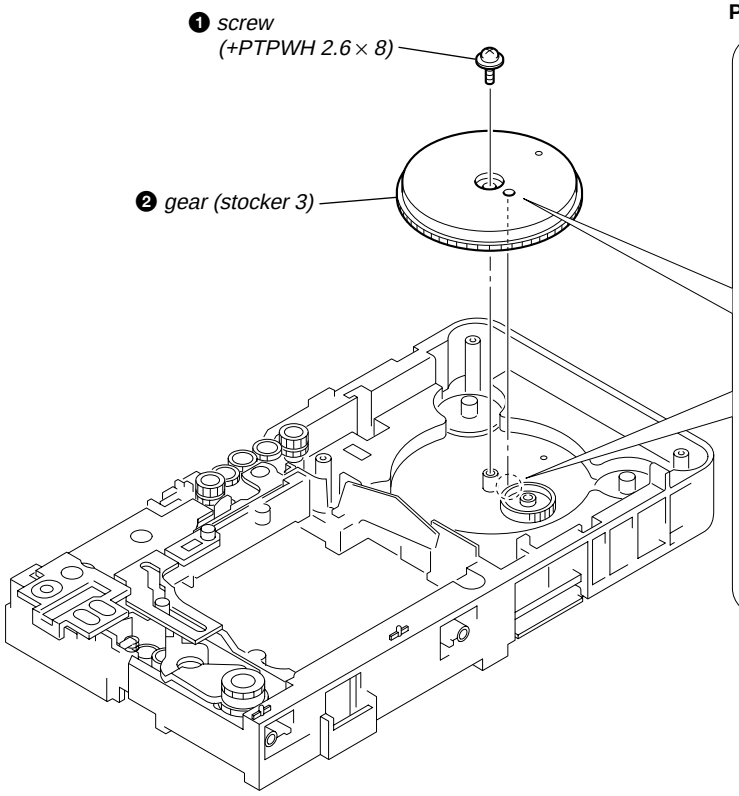
PRECAUTION DURING CAM (STOCKER) INSTALLATION

Before installing the cams (stocker), fix the gear (stocker 3) in the manner so that the hole of the gear (stocker 3) should be aligned with the hole of the chassis located beneath the gear (stocker 3). Be sure to install the cams (stocker) in such a way that the grooves of the cams (stocker) face the direction of the arrows.



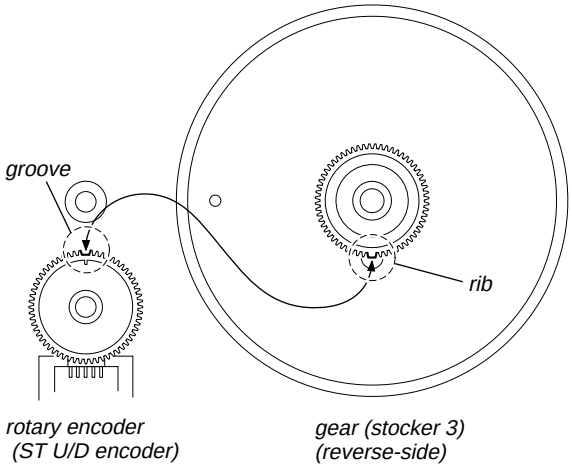

❹ lever (SW)
❶ screw (+PTPWH 2.6× 8)
❷ tension spring (SW)
❺ two screws (+PTPWH 2.6× 8)
❸ hook
❼ screw (+PTPWH 2.6× 8)
❻ two cams (stocker)
❽ cam (stocker)

3-18. GEAR (STOCKER 3)



PRECAUTION DURING GEAR (STOCKER 3) INSTALLATION

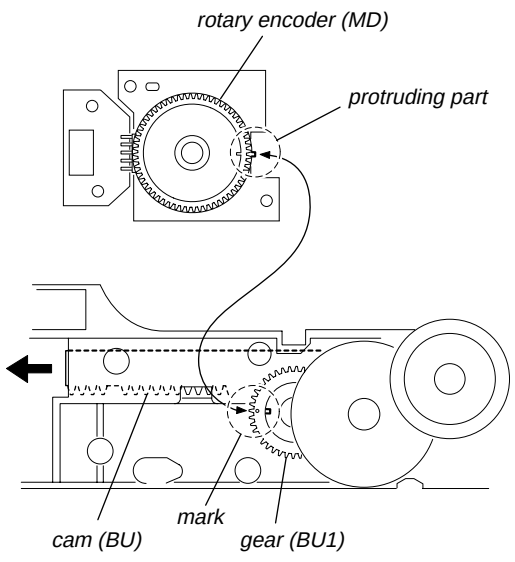
Be sure to align the rib of the gear (stocker 3) with the groove of the rotary encoder.

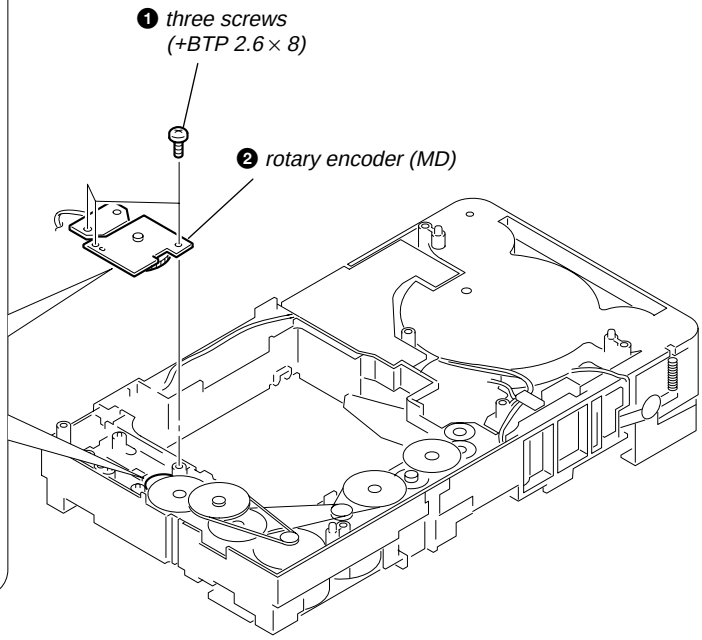


3-19. ROTARY ENCODER (MD)

PRECAUTION DURING ROTARY ENCODER (MD) INSTALLATION

Slide the cam (BU) in the direction of the arrow so that the mark of the gear (BU1) can be seen. Engage the gears while aligning the mark of the gear (BU1) with the protruding part of the rotary encoder.

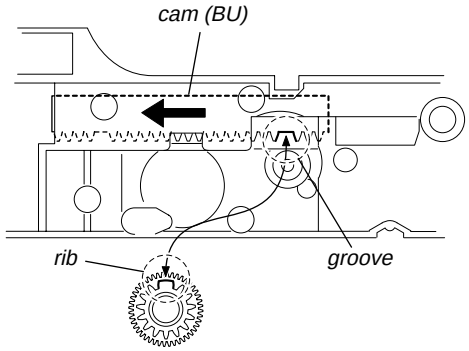


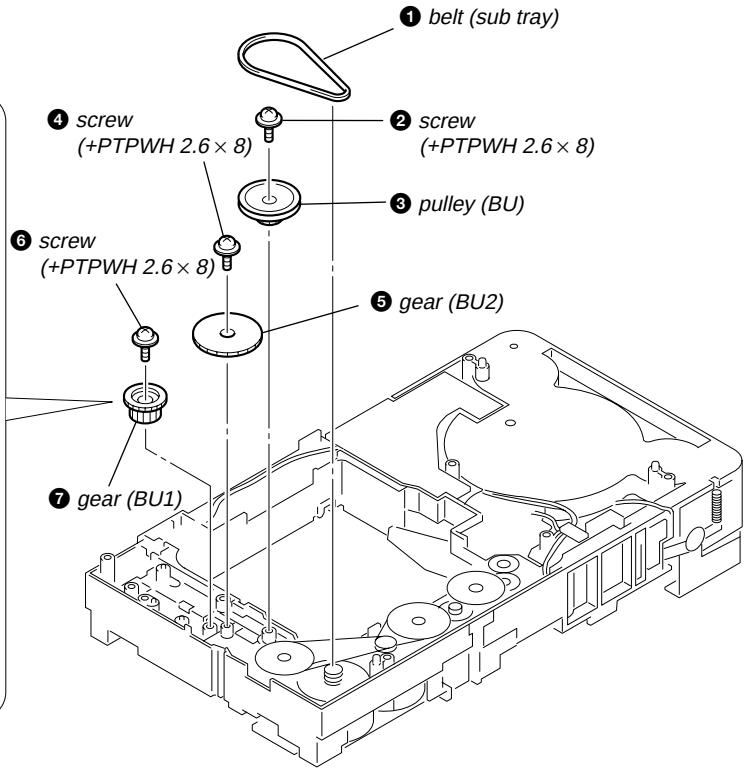


3-20. GEAR (BU1)

PRECAUTION DURING GEAR (BU1) INSTALLATION

Before re-assembling, slide the cam (BU) in the direction of the arrow.
Assemble the gear (BU1) in such a manner that the groove of the cam (BU) is aligned with the rib of the gear (BU1).





SECTION 4
TEST MODE

Note 1: Regarding the notification symbol "R"
Because the number of the operating buttons of this product are limited, some operations require use of the operating buttons of the remote commander, When a specific operation requires use of the operating buttons of the remote commander, "R" is added to the specific operating procedure in this manual. Example [MENU/NO "R"] The [MENU/NO] button of remote commander.

Note 2: Incorrect operations may be performed if the test mode is not entered properly.
In this case, press the [I/⏻] button to turn the power off, and retry to enter the test mode.

1. Cold Reset

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customers.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press three buttons [■] , [⏏] and [I/⏻] simultaneously.
3. When this button is operated, display as "COLD RESET" for a while and all of the settings are reset.

2. Panel Test Mode

- This mode is used to check the software version, LCD, LED and keyboard.

2-1. DVD LED Test Mode

Procedure:

1. Press the [I/⏻] button to turn on the power.
2. Press three bottons [⏸], [⏮] and [⏏] simultaneously.
3. When the display LED test mode is activated, all segments are turned on.
4. To exit from this mode, pull out the AC plug.

2-2. Version Test Mode

Procedure:

1. When the panal test mode is activated, press the [⏮] button and the message "DC1✱✱✱" is displayed, the version test mode is activated.
2. Whenever press the [⏮] button, the version is displayed in order of NA, MC, SYS, UI, DVD, CDMA, CDMB, ST005, TA, TM and DC1.
3. Press the [⏭] button and the date of the softwafe production is displayed.
4. Press the [⏭] button again and the version is displayed.
5. To exit from this mode, pull out the AC plug.

2-3. Key Test Mode

Procedure:

1. When the panel test mode is activated, press the [▷] button, to select the key test mode.
2. To enter the KEY test mode, the fluorecent indicator displays "K0 VO". Each time a button is pressed, "KEY" value increases. However, once a button is pressed, it is no longer taken into account. When all keys are pressed correctly, "K13 VO" is displayed.
3. To exit from this mode, pull out the AC plug.

3. Disc Tray Lock

The disc tray lock function for the antitheft of an demonstration disc in the store is equipped.

Setting Procedure :

1. Press the [I/⏻] button to turn the set on.
2. Press the FUNCTION button to set DVD function.
3. Insert a disc.
4. Press the [■] button and the [⏏] button simultaneously for five seconds.
5. The message "LOCKED" is displayed and the tray is locked.

Releasing Procedure :

1. Press the [■] button and the [⏏] button simultaneously for five seconds. again.
2. The message "UNLOCKED" is displayed and the tray is unlocked.

Note: When "LOCKED" is displayed, the slot lock is not released by turning power on/off with the [I/⏻] button.

4. DVD Ship Mode

- Use this mode when returning the set to the customer after repair.

Procedure:

1. Press the [I/⏻] button to turn the set on.
2. Press the [FUNCTION] button to set the function "DVD".
3. Press three buttons [■], and [I/⏻] simultaneously.
4. After a message "MECHA LOCK" is displayed on the fluorescent indicator tube, pull out the AC plug.
5. To exit from this mode, press the [I/⏻] button to turn the set on.

5. DVD Debug In Mode

Procedure:

1. Press the [I/⏻] button to turn the set on.
2. Press the [FUNCTION] button to set the function "DVD".
3. Press the three buttons [⏮], [⏏] and [⏭] simultaneously.
4. To exit from this mode, press the [I/⏻] button to turn the set on.

6. AM Step Change

- A step of AM channels can be changed over between 9 kHz and 10 kHz.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Select the function "TUNER", and press [FUNCTION] button to select the BAND "AM".
3. Press [I/⏻] button to turn the set OFF.
4. Press [⏭] and [I/⏻] buttons simultaneously, and the display of fluorescent indicator tube changes to "AM 9 k STEP" or "AM 10 k STEP", and thus the channel step is changed over.

DVD SECTION

[TEST DISC LIST]

Be sure to use the DVD disc that matches the signal standards of your region.

• CD
YEDS-18 (Part No.: 3-702-101-01)
PATD-012 (Part No.: 4-225-203-01)
• DVD SL (Single Layer)
NTSC : HLX-503 (Part No.: J-6090-069-A)
HLX-504 (Part No.: J-6090-088-A)
PAL : HLX-506 (Part No.: J-6090-077-A)
• DVD DL (Dual Layer)
NTSC : HLX-501 (Part No.: J-6090-071-A)
HLX-505 (Part No.: J-6090-089-A)
PAL : HLX-507 (Part No.: J-6090-078-A)

4-1. GENERAL DESCRIPTION

The Mirror Time and IOP measurement allows you to make diagnosis and adjustment simply by using the remote commander and monitor TV. The instructions, diagnosis results, etc. are given on the on screen display (OSD).

The Mirror Time and IOP measurement is required is such events where servicing a DVD-Player includes changing the Base Unit (BU). For each new BU to be used with a certain MV-044 board, Mirror Time and IOP measurement need to be carried out.

4-2. STARTING TEST MODE

Press three buttons ■ , ⏏ and VOLUME + simultaneously with the DVD player in standby mode.
The Test Mode starts, then the menu shown below will be displayed on the TV screen.

```
Remocon Diagnosis Menu

0. External Chip Check
1. Servo Parameter Check
2. Drive Manual Operation
3. Emergency History
4. Version Information
5. Video Level Adjustment

Model Name : DC1_XX
IF-con     : Ver. xx.xx (xxxx)
Syscon     : Ver. x.xxx
```

The menu above is the Remocon Diagnosis Menu screen which consists of six main function. At the bottom of the menu screen, the model name and IF-con version. To enter Mirror Time Adjustment menu, press button 2 “R” on the remote commander to enter Drive Manual Operation menu. To exit from the Test Mode, press the power button on the remote commander.

4-3. DRIVE MANUAL OPERATION

The Drive Manual Operation menu consists of five main function. By pressing 2 “R” button on the remote commander in the Remocon Diagnosis Menu, the screen will appear as below.

```
Drive Manual Operation

1. Servo Control
2. Track/Layer Jump
3. Manual Adjustment
4. Mecha test mode
5. MIRR time Adjust
0. Return to Top Menu
```

4-4. MIRROR TIME ADJUSTMENT

To enter Mirror Time Adjustment, press 5 “R” button on the remote commander. The screen will appear as below.

```
MIRR time Adjust Menu

1. CD MIRR time Check:
2. DVD MIRR time Check:
3. Threshold:
4. Save to EEPROM
5. Default set MIRR time

[Open] Tray open [Close] Tray close
[0] Return to previous menu
```

There are five main commands in the Mirr time Adjust menu as shown in the figure above. The functions of each command are described in the following page.

1. CD MIRR time Check
This command checks the Mirror time value for CD disc.

2. DVD MIRR time Check
This command checks the Mirror time value for DVD disc.

3. Threshold
This command displays the threshold value between CD and DVD mirror time.

4. Save to EEPROM
This command saves an adjusted mirror time value to the EEPROM.

5. Default set MIRR time
This command will set CD and DVD mirror time to firmware default value.

[Open] / [Close]
Pressing the ⏏ button controls the tray for disc change during mirror time adjustment.
[0] Return to previous menu
Press 0 “R” button to return to previous menu.

4-4-1. EXECUTING MIRROR TIME ADJUSTMENT

In order to execute mirror time adjustment, the following standard procedures must be followed.

(1) In standby mode, press three buttons ■ , ⏏ and VOLUME + simultaneously.
(2) Select “2. Drive Manual Operation”.

```
Remocon Diagnosis Menu

0. External Chip Check
1. Servo Parameter Check
2. Drive Manual Operation
3. Emergency History Check
4. Version information
5. Video Level Adjustment

Model      : DC1_xx
IF-con     : Ver. xx.xx (xxxx)
Syscon     : Ver. x.xxx
```

(3) Select “5. MIRR time Adjust”.

```
Drive Manual Operation

1. Servo Control
2. Track/Layer Jump
3. Manual Adjustment
4. Mecha test mode
5. MIRR time Adjust
0. Return to Top Menu
```

(4) Select “5. Default set MIRR time”.

```
MIRR time Adjust Menu

1. CD MIRR time Check:
2. DVD MIRR time Check:
3. Threshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [Close] Tray close
[0] Return to previous menu
```

(5) Select “3. Threshold”.

(6) Confirm the number. If it is 75, go to next step. If it is any other value, return to step 4.

```
MIRR time Adjust Menu

1. CD MIRR time Check:
2. DVD MIRR time Check:
3. Threshold:(75) ←
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [Close] Tray close
[0] Return to previous menu
```

(7) Push ⏏ button to eject tray.

(8) Insert Test Disc HLX-504 into tray.

(9) Push ⏏ button to close tray.

(10) Push “2. DVD MIRR time Check”.

(11) Wait for HEX number to display.

(12) Confirm the number, if XX is 28 ~ 70, proceed with next step. If no, return to 8.

```
MIRR time Adjust Menu

1. CD MIRR time Check:
2. DVD MIRR time Check: xx (XX)
3. Thereshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] tray open [close] Tray close
[0] Return to previous menu
```

(13) Push “4. Save to EEPROM”.

(14) Confirm the same values are displayed. If it is not same, return to step 7.

```
MIRR time Adjust Menu

1. CD MIRR time Check:
2. DVD MIRR time Check: (XX XX)
3. Threshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [close] Tray close
[0] Return to previous menu
```

(15) Push ⏏ button to eject tray.

(16) Take out HLX-504 and insert Test Disc YEDS-18 into tray.

(17) Push ⏏ button to close tray.

(18) Push “1. CD MIRR time check”.

(19) Wait for HEX number to display.

(20) Confirm the number, if YY is 5A ~ E8, proceed with next step. If no, return to 15.

```
MIRR time Adjust Menu

1. CD MIRR time Check: yy (YY)
2. DVD MIRR time Check: XX XX
3. Threshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [close] Tray close
[0] Return to previous menu
```

(21) Push “4. Save to EEPROM”.

(22) Confirm the same values are displayed. If it is not the same, return to step 15.

```
MIRR time Adjust Menu

1. CD MIRR time check: (YY YY)
2. DVD MIRR time check: XX XX
3. Threshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [close] Tray close
[0] Return to previous menu
```

(23) Push ⏏ button to eject tray.

(24) Remove Test Disc YEDS-18 from tray.

(25) Push ⏏ button to close tray.

(26) Press [0 “R”] button to the Drive Manual Operation menu.

(27) Press [0 “R”] button to return to the Remocon Diagnosis Menu.

(28) Press the [I/⏻] button to switch OFF set.

4-5. EXECUTING IOP MEASUREMENT

In order to execute mirror time adjustment, the following standard procedures must be followed.

(1) In standby mode, press three buttons [■] , [⏏] and [VOLUME +] simultaneously.

```
        Remocon Diagnosis Menu

0. External Chip Check
1. Servo Parameter Check
2. Drive Manual Operation
3. Emergency History Check
4. Version information
5. Video Level Adjustment

Model         : DC1 XX
IF-con  Ver   : XX.XX (XXXX)
Syscon  Ver   : X.XX
```

(2) Select "2. Drive Manual Operation" by pressing the [2 "R"] button on the remote commander. The screen will appear as below.

```
        Drive Manual Operation

1. Servo Control
2. Track/Layer Jump
3. Manual Adjustment
4. Tray Aging Mode
5. MIRR time adjust
0. Return to top Menu
```

(3) Select "3. Manual Adjustment" by pressing the [3 "R"] button on the remote commander. The screen will appear as below.

```
        Manual Adjust

1. Track Balance Adjust:
2. Track Gain Adjust:
3. Focus Balance Adjust:
4. Focus Gain Adjust:
5. Eg boost Adjust:
6. Iop:
7. TRV. Level:
8. S curve(FE) Level:
9. RFL(PI) Level:
0. MIRR Time:

↓ ↑  Change Value
[RETURN] Return to previous menu
```

(4) Select Iop by pressing [6 "R"] button on the remote commander.

(5) Wait until a hexadecimal number appear.

```
        Manual Adjust

1. Track Balance Adjust:
2. Track Gain Adjust:
3. Focus Balance Adjust:
4. Focus Gain Adjust:
5. Eq Boost Adjust:
6. Iop: ED 9E:
7. TRV. Level:
8. S curve(FE) Level:
9. RFL(PI) Level:
0. MIRR Time:

Change Value
[0] Return to previous menu
```

(6) Convert each data from hexadecimal to decimal using conversion table.

(7) Substract between these two values.

(8) If the remainder is smaller than 93 (decimal), then it is OK. However if the value is higher than 93, then the BU is defective and need to be change.

(9) Press [RETURN "R"] button to return back to previous menu.

(10) Press [0 "R"] button to return to Top Menu and power OFF the DVD Player.

ELECTRICAL ADJSTMENT

DVD SECTION

When the base unit is replaced, perform the adjustment and the measurement as shown below in this order.

1) MIRROR TIME ADJUSTMENT (See page 23)
2) EXECUTING IOP MEASUREMENT (See page 25)

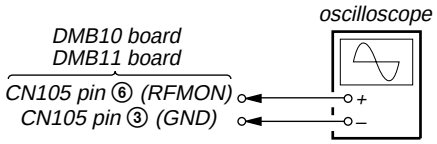
[TEST DISC LIST]

Be sure to use the DVD disc that matches the signal standards of your region.

• CD
YEDS-18 (Part No.: 3-702-101-01)
PATD-012 (Part No.: 4-225-203-01)
• DVD SL (Single Layer)
NTSC : HLX-503 (Part No.: J-6090-069-A)
HLX-504 (Part No.: J-6090-088-A)
PAL : HLX-506 (Part No.: J-6090-077-A)
• DVD DL (Dual Layer)
NTSC : HLX-501 (Part No.: J-6090-071-A)
HLX-505 (Part No.: J-6090-089-A)
PAL : HLX-507 (Part No.: J-6090-078-A)

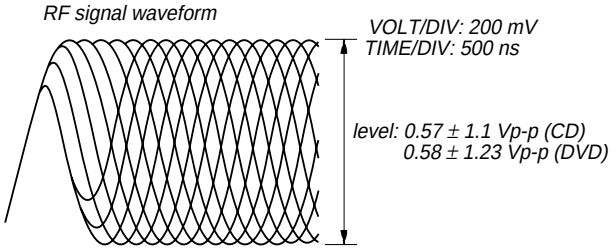
[RF Level Check]

Connection:

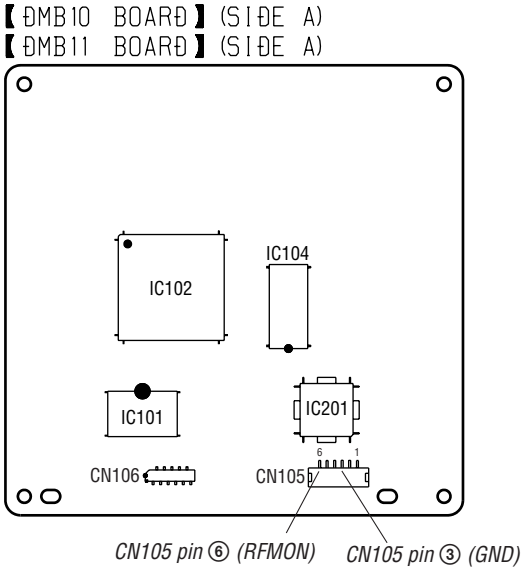


Procedure:

1. Conect an oscilloscope to CN105 pin ⑥ (RFMON) and CN105 pin ③ (GND) on the DMB10 or DMB11 board.
2. Turn the power on.
3. Insert the CD test disc (refer to the TEST DISC LIST), and press the ▷ button to play the disc back.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.
   Note: A clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.
5. Eject the CD disc, and insert the DVD SL test disk (refer to the TEST DISC LIST), and press the ▷ button to play the disc back.



Checking Location: DMB10 board or DMB11 board (Side A)



SECTION 6
DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For Schematic Diagrams.
Note:
- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

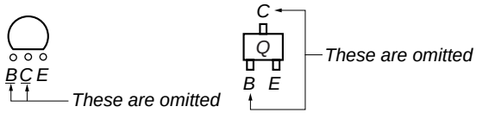
- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages and waveforms are dc with respect to ground in service mode.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
  no mark : DVD STOP
- Voltages are taken with VOM (Input impedance 10 MΩ).
- Circled numbers refer to waveforms.
- Signal path.
  - : AUDIO
  - : CD PLAY
  - : DVD PLAY
  - : TUNER
  - : VIDEO
  - : Y
  - : CHROMA
  - : COMPONENT VIDEO
  - : R, G, B
  - : AUDIO IN
- Abbreviation
  - AUS : Australian model.
  - CND : Canadian model.
  - E32 : 110 – 240 V AC Area in E model.
  - EA : Saudi Arabia model.
  - MX : Mexican model.
  - SP : Singapore model.

For Printed Wiring Boards.
Note:
- ○——— : parts extracted from the component side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing.

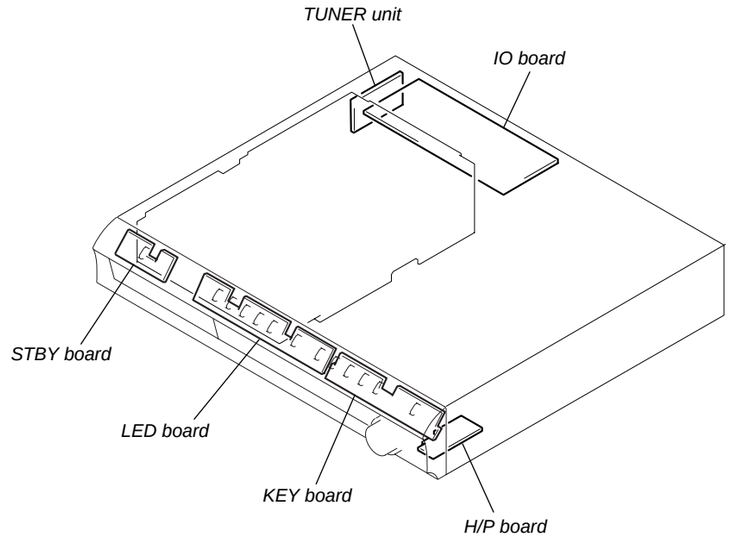
(The other layers' patterns are not indicated.)

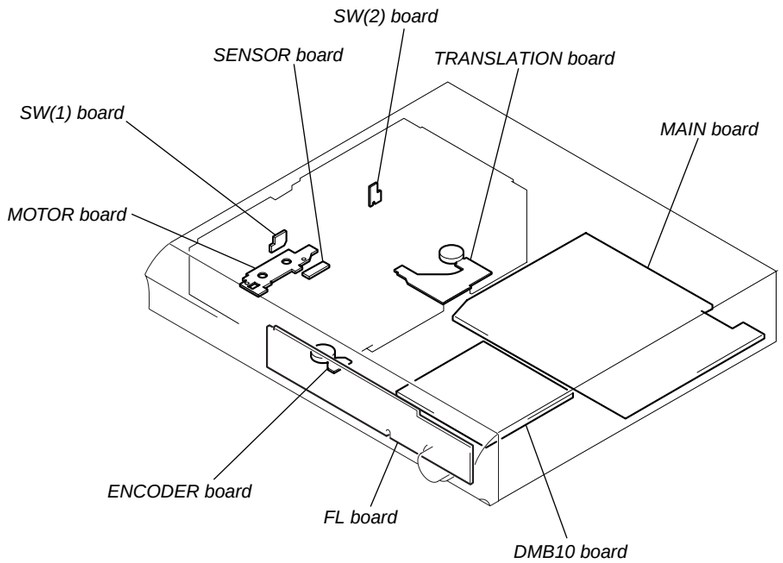
Caution:
Pattern face side: (SIDE A) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (SIDE B) Parts on the parts face side seen from the parts face are indicated.

- Indication of transistor.

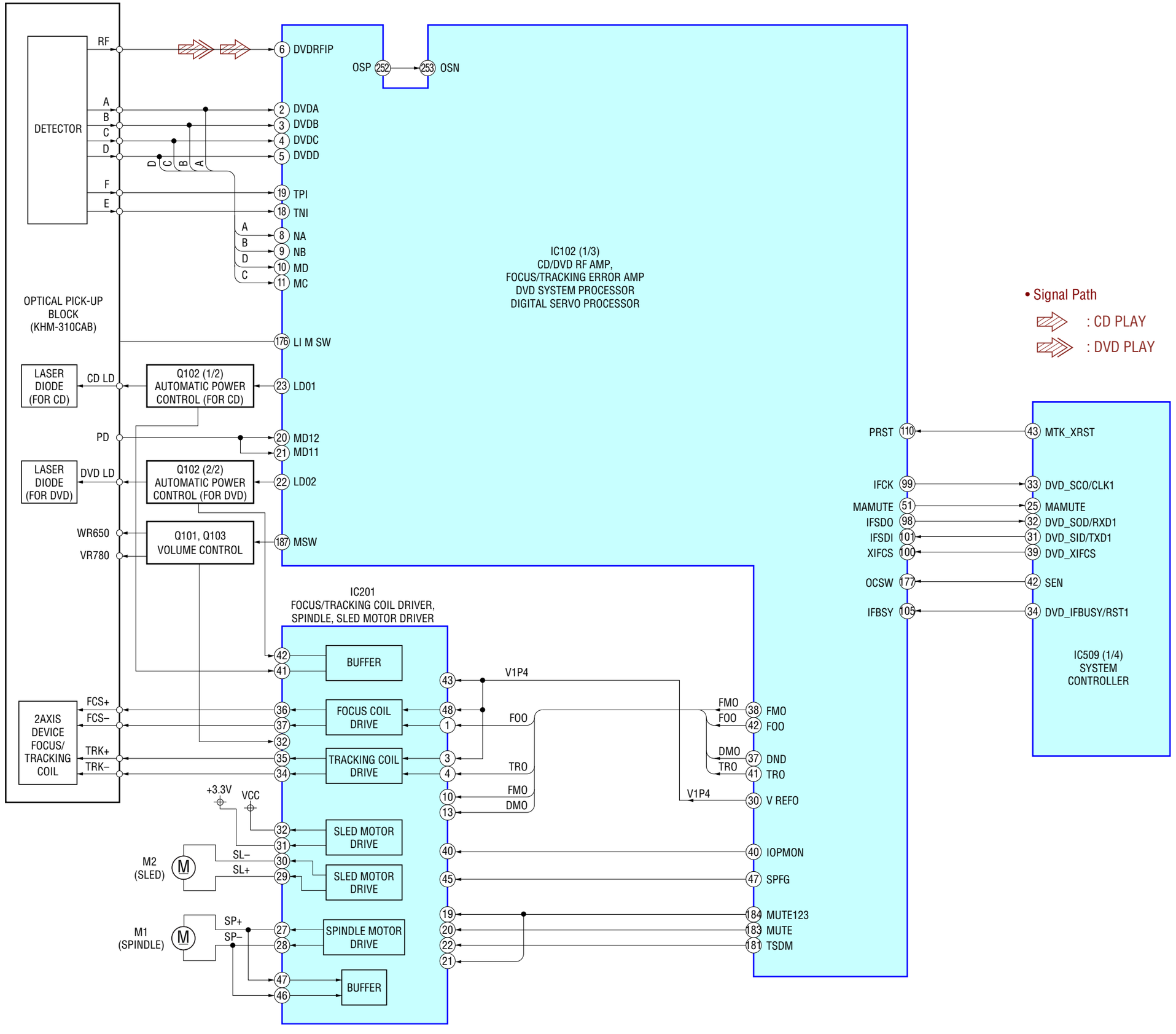


• Circuit Boards Location

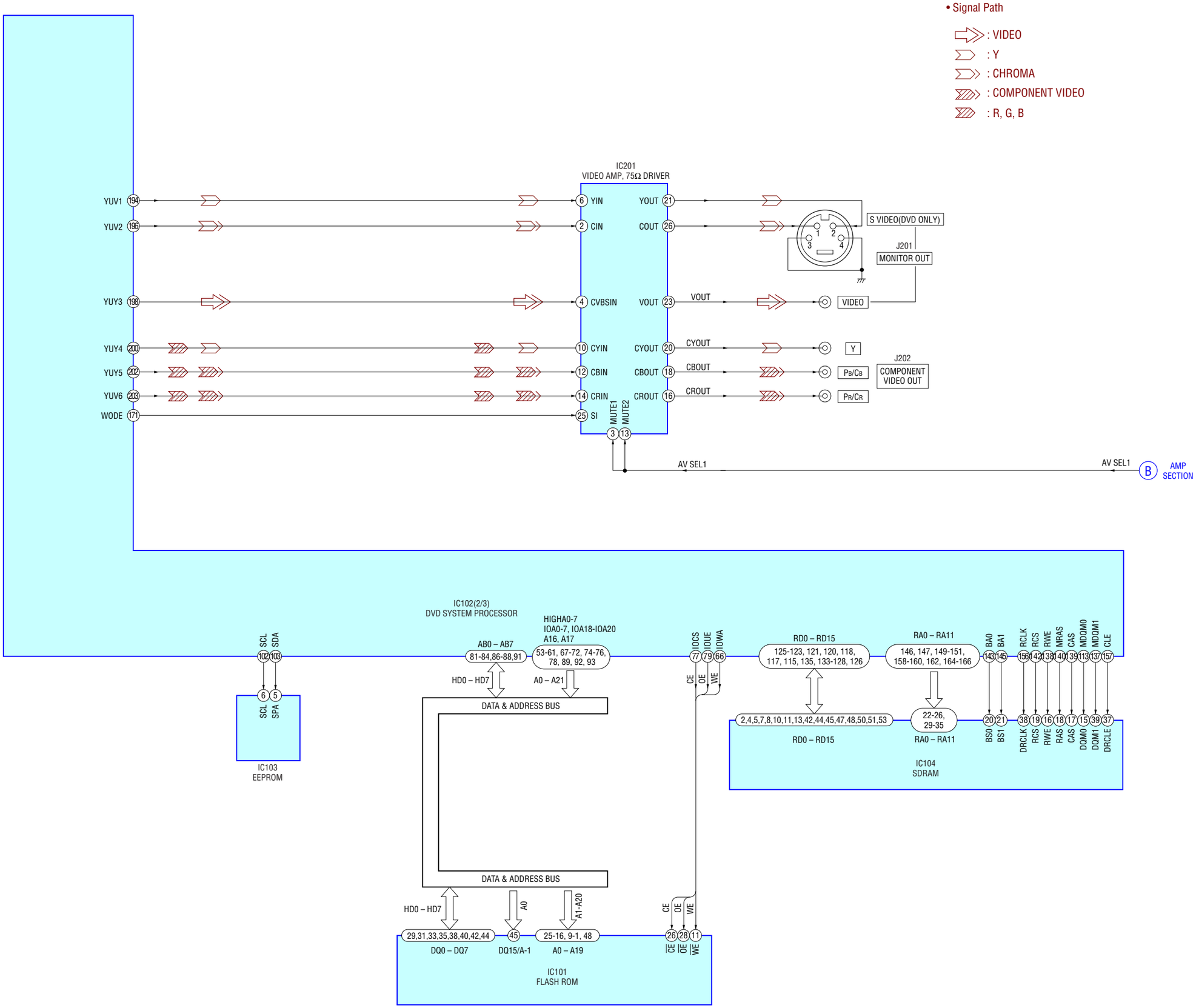




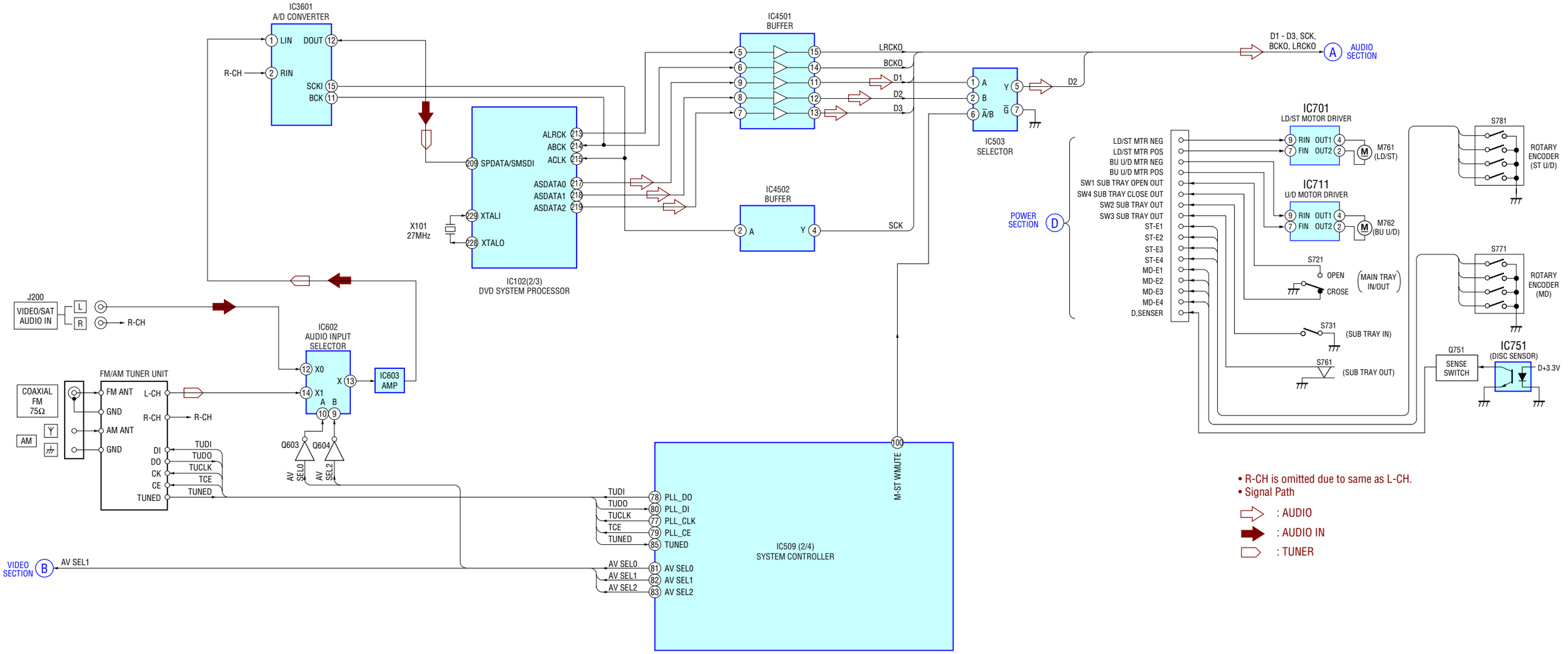
6-1. BLOCK DIAGRAM – RF/SERVO SECTION –



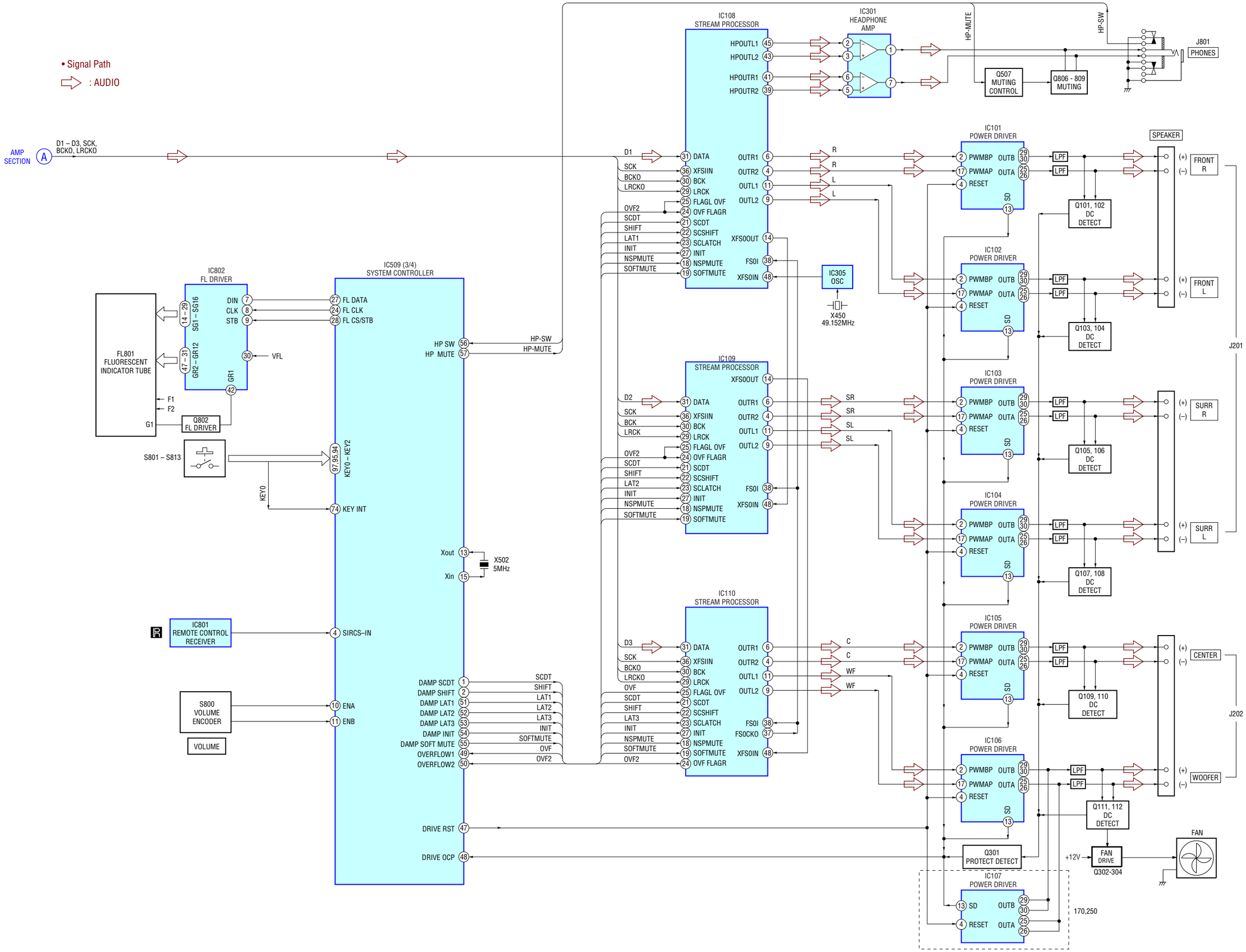
– VIDEO SECTION –



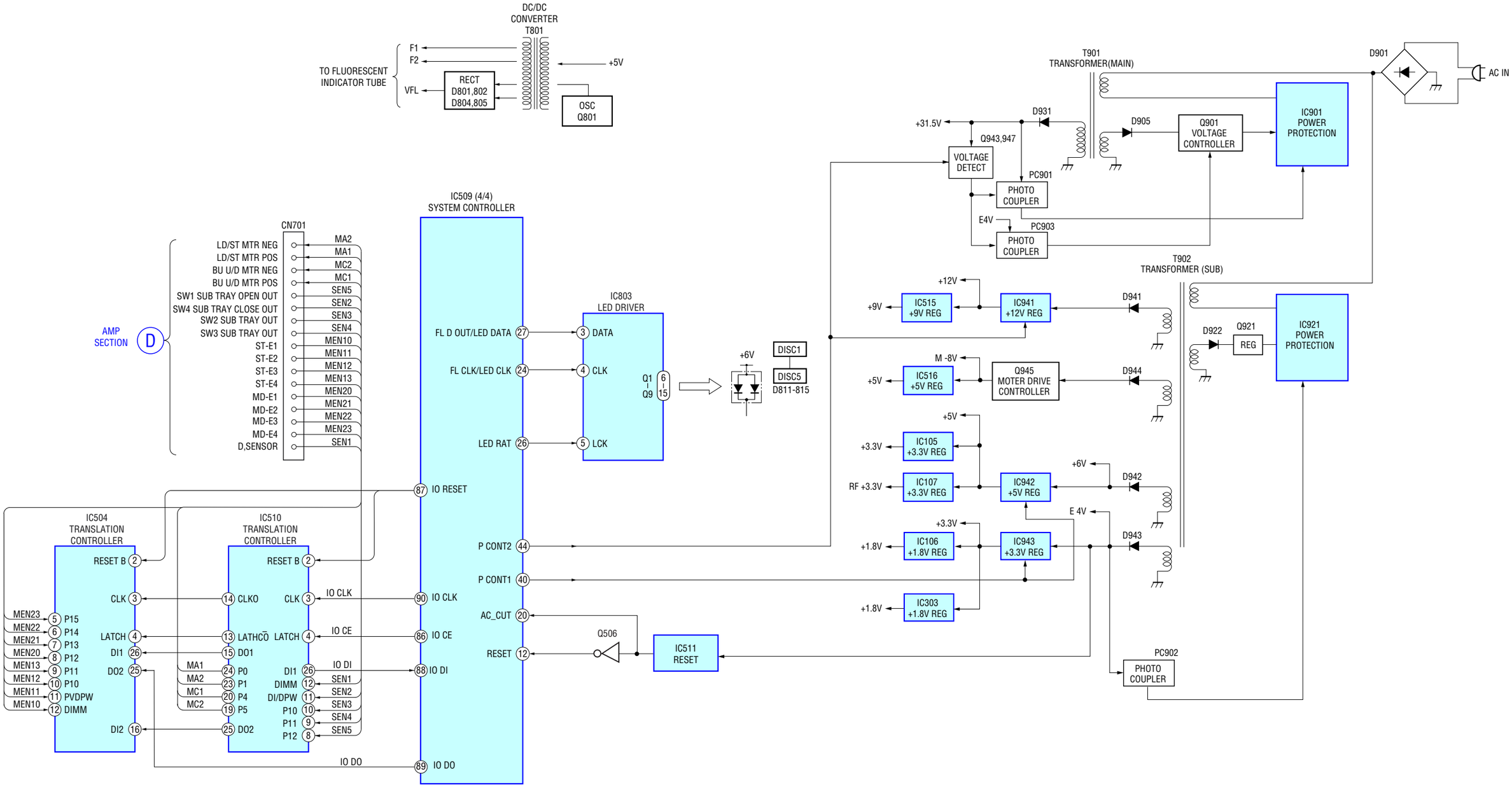
– AMP SECTION –


IC3601
A/D CONVERTER
LIN
DOUT
R-CH
RIN
SCKI
BCK
IC4501
BUFFER
LRCKO
BCKO
D1
D2
D3
IC503
SELECTOR
D1 - D3, SCK,
BCKO, LRCKO
AUDIO SECTION
D2
ALRCK
ABCK
ACLK
SPDATA/SMSDI
ASDATA0
ASDATA1
ASDATA2
X101
27MHz
XTALI
XTALO
IC4502
BUFFER
SCK
IC102(2/3)
DVD SYSTEM PROCESSOR
POWER SECTION
LD/ST MTR NEG
LD/ST MTR POS
BU U/D MTR NEG
BU U/D MTR POS
SW1 SUB TRAY OPEN OUT
SW4 SUB TRAY CLOSE OUT
SW2 SUB TRAY OUT
SW3 SUB TRAY OUT
ST-E1
ST-E2
ST-E3
ST-E4
MD-E1
MD-E2
MD-E3
MD-E4
D,SENSER
IC701
LD/ST MOTOR DRIVER
RIN
FIN
OUT1
OUT2
M761
(LD/ST)
IC711
U/D MOTOR DRIVER
M762
(BU U/D)
S721
OPEN
CROSE
(MAIN TRAY IN/OUT)
S731
(SUB TRAY IN)
S761
(SUB TRAY OUT)
S781
ROTARY ENCODER (ST U/D)
S771
ROTARY ENCODER (MD)
IC751
(DISC SENSOR)
Q751
SENSE SWITCH
D+3.3V
J200
VIDEO/SAT AUDIO IN
L
R
R-CH
IC602
AUDIO INPUT SELECTOR
X0
X1
A
B
X
IC603
AMP
FM/AM TUNER UNIT
COAXIAL FM 75Ω
FM ANT
GND
AM
AM ANT
GND
L-CH
R-CH
R-CH
TUDI
TUDO
TUCLK
TCE
TUNED
DI
DO
CK
CE
TUNED
Q603
Q604
AV SEL0
AV SEL2
M-ST WMUTE
100
IC509 (2/4)
SYSTEM CONTROLLER
TUDI
TUDO
TUCLK
TCE
TUNED
PLL_DO
PLL_DI
PLL_CLK
PLL_CE
TUNED
AV SEL0
AV SEL1
AV SEL2
AV SEL0
AV SEL1
AV SEL2
VIDEO SECTION
AV SEL1
• R-CH is omitted due to same as L-CH.
• Signal Path
: AUDIO
: AUDIO IN
: TUNER

– AUDIO SECTION –

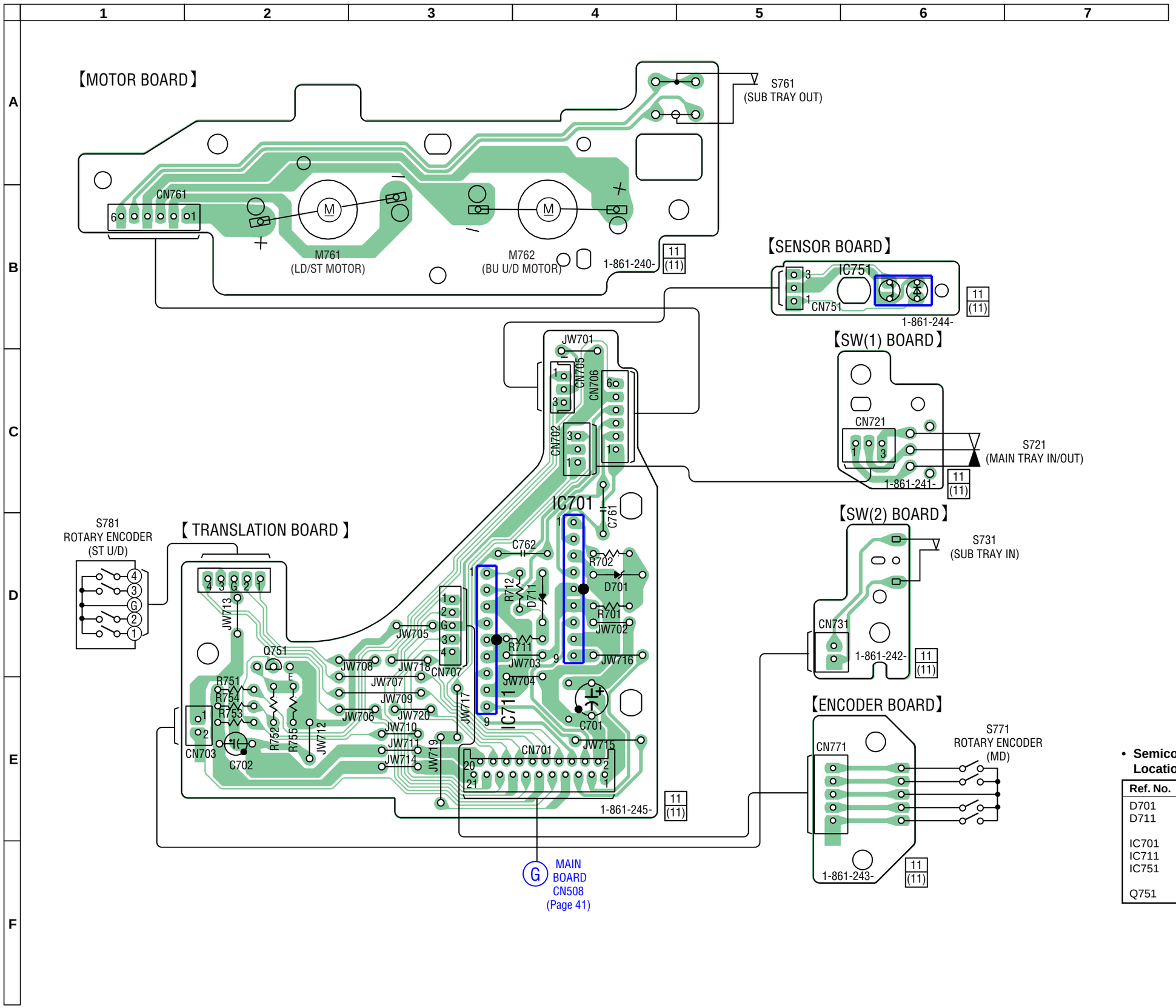


– POWER SECTION –



6-2. PRINTED WIRING BOARD – DVD MECHANISM SECTION –

• See page 27 for Circuit Boards Location.

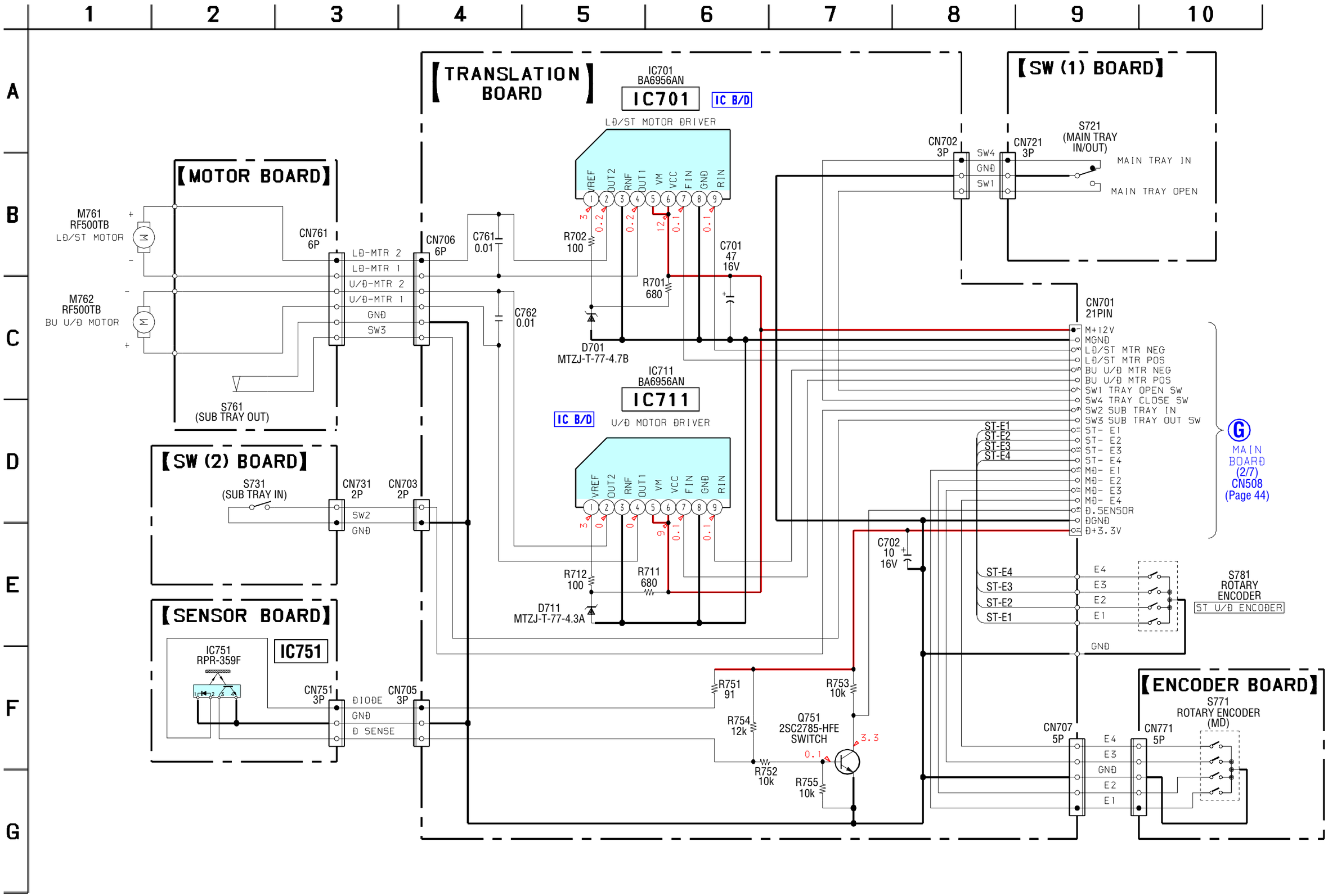


- **Semiconductor Location**

Ref. No.	Location
D701	D-4
D711	D-4
IC701	C-4
IC711	E-4
IC751	B-6
Q751	D-2

6-3. SCHEMATIC DIAGRAM – DVD MECHANISM SECTION –

• See page 54 for IC Block Diagrams.



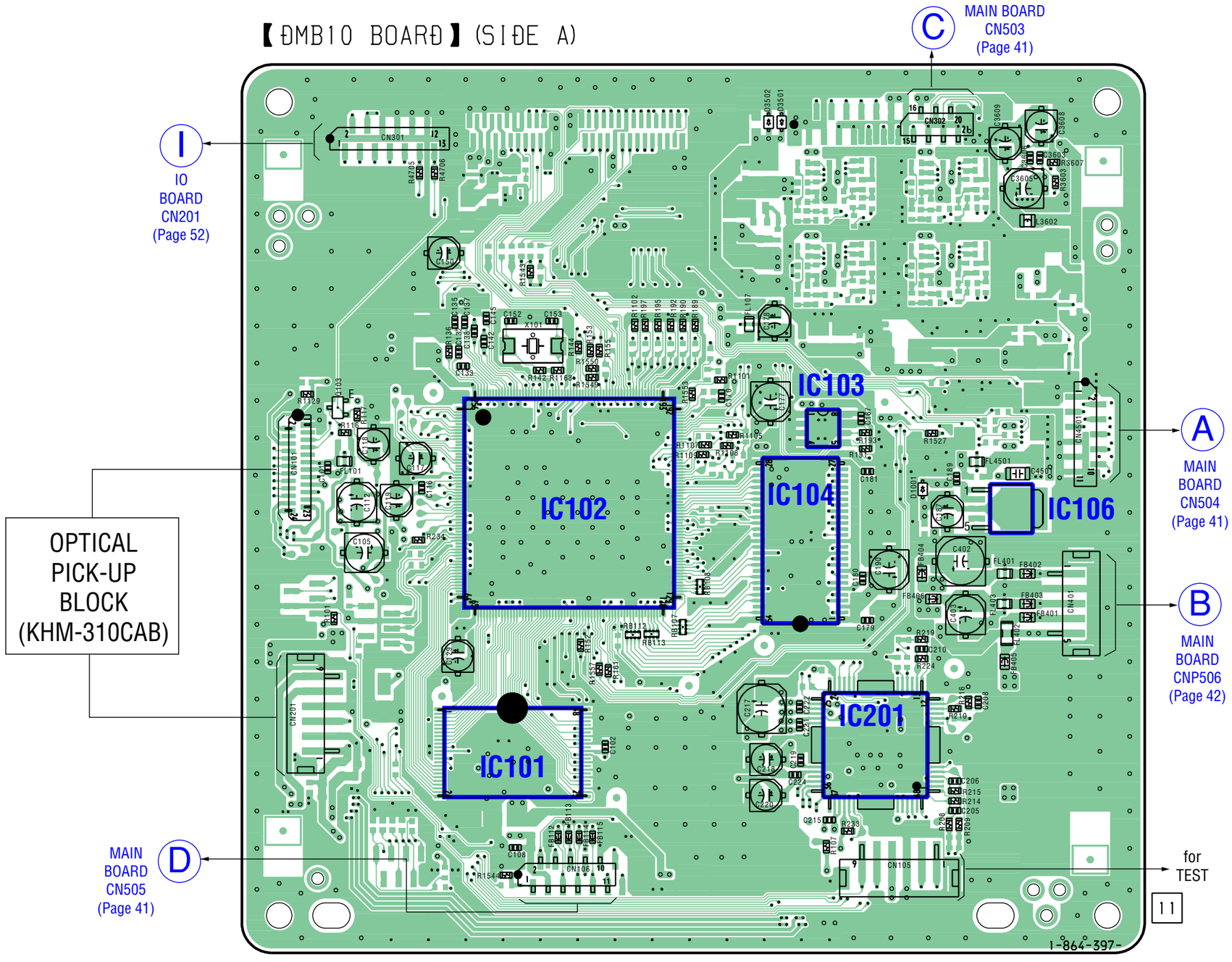
6-4. PRINTED WIRING BOARD – DMB10 SECTION (SIDE A) –

• See page 27 for Circuit Boards Location.

:Uses unleaded solder.

☆ IC103 (EEP ROM) can not be replaced individually. Replace it with DMB10 board assembly for service.

【DMB10 BOARD】(SIDE A)



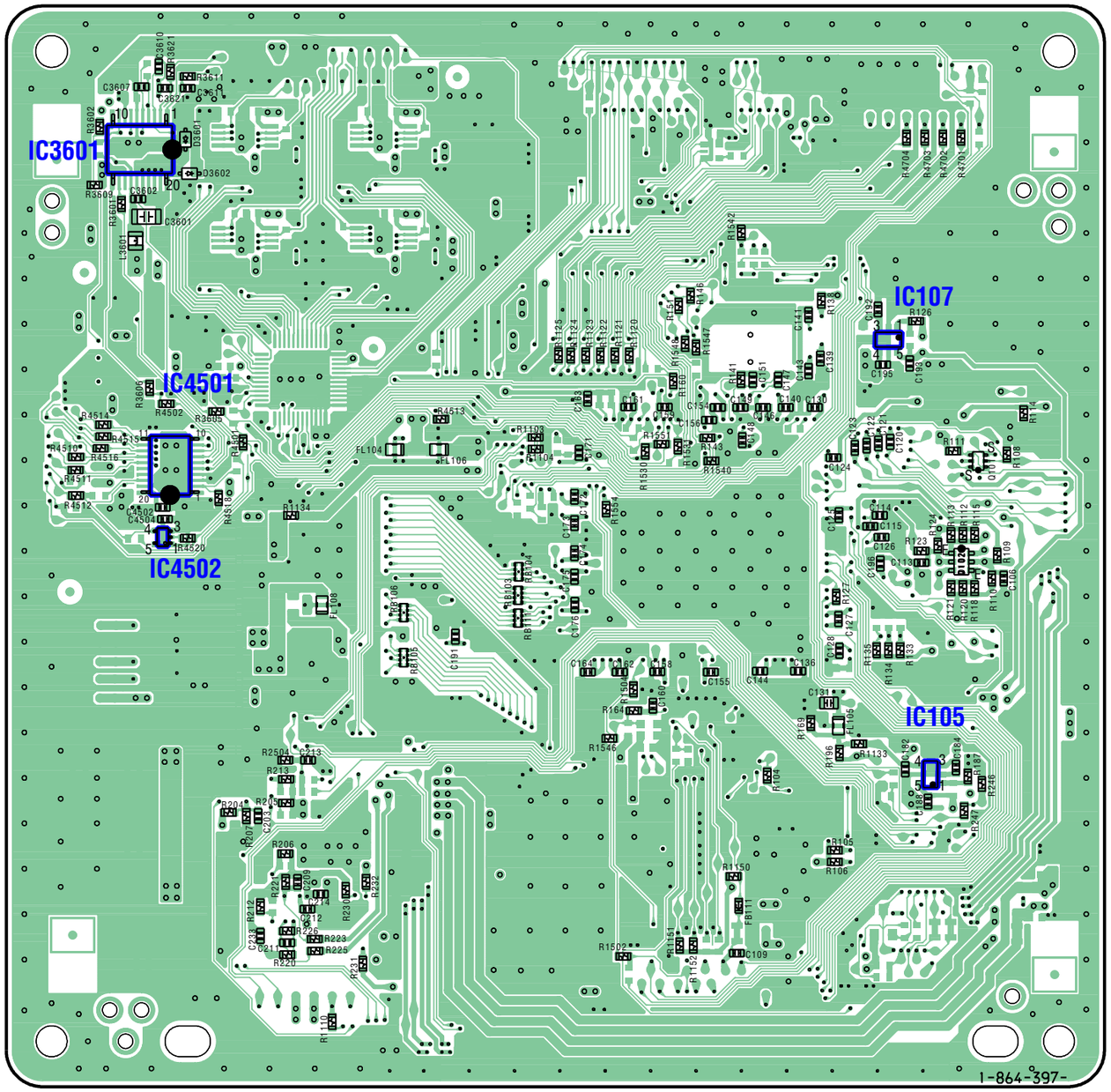
- **Semiconductor Location**

Ref. No.	Location
D1001	C-5
D3501	A-4
D3502	A-4
IC101	D-3
IC102	C-3
IC103	C-4
IC104	C-4
IC106	C-5
IC201	D-5
Q103	C-2

6-5. PRINTED WIRING BOARD – DMB10 SECTION (SIDE B) –

• See page 27 for Circuit Boards Location. :Uses unleaded solder.

【DMB10 BOARD】(SIDE B)



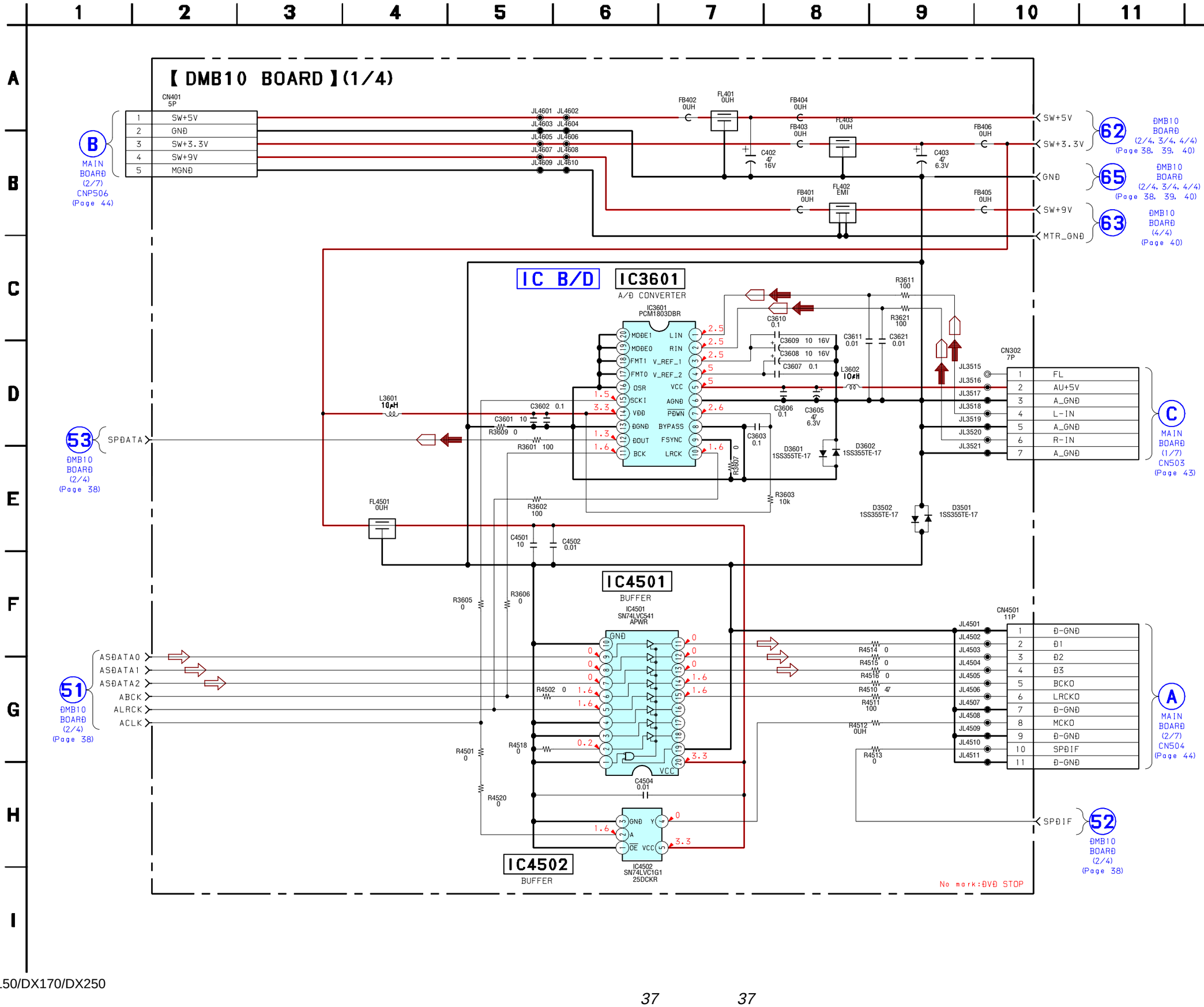
11

- **Semiconductor Location**

Ref. No.	Location
D3601	B-2
D3602	B-2
IC105	D-5
IC107	B-5
IC3601	B-2
IC4501	C-2
IC4502	C-2
Q101	C-5
Q102	C-5

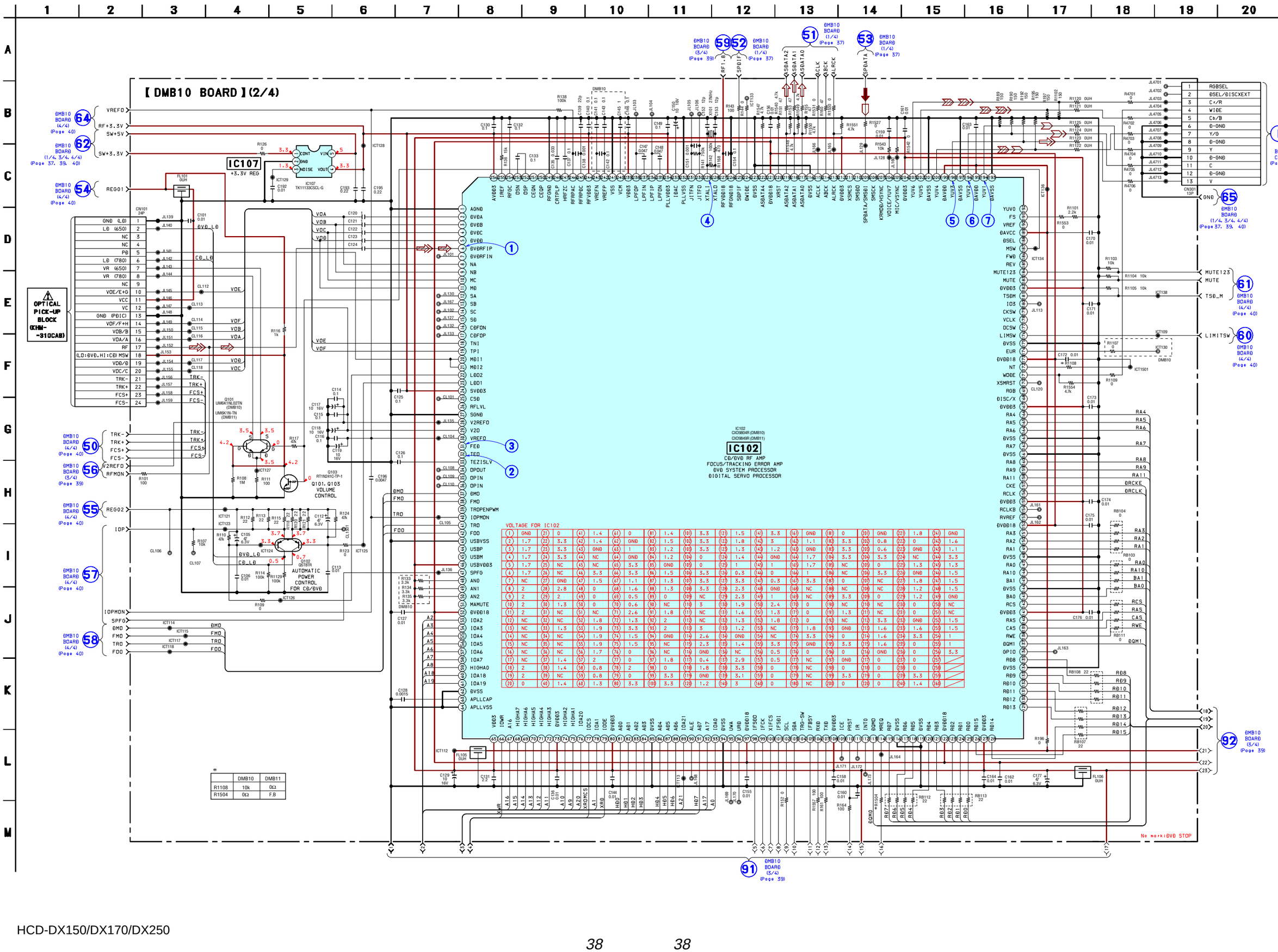
6-6. SCHEMATIC DIAGRAM – DMB10 SECTION (1/4) –

• See page 54 for IC Block Diagrams.



6-7. SCHEMATIC DIAGRAM – DMB10 SECTION (2/4) –

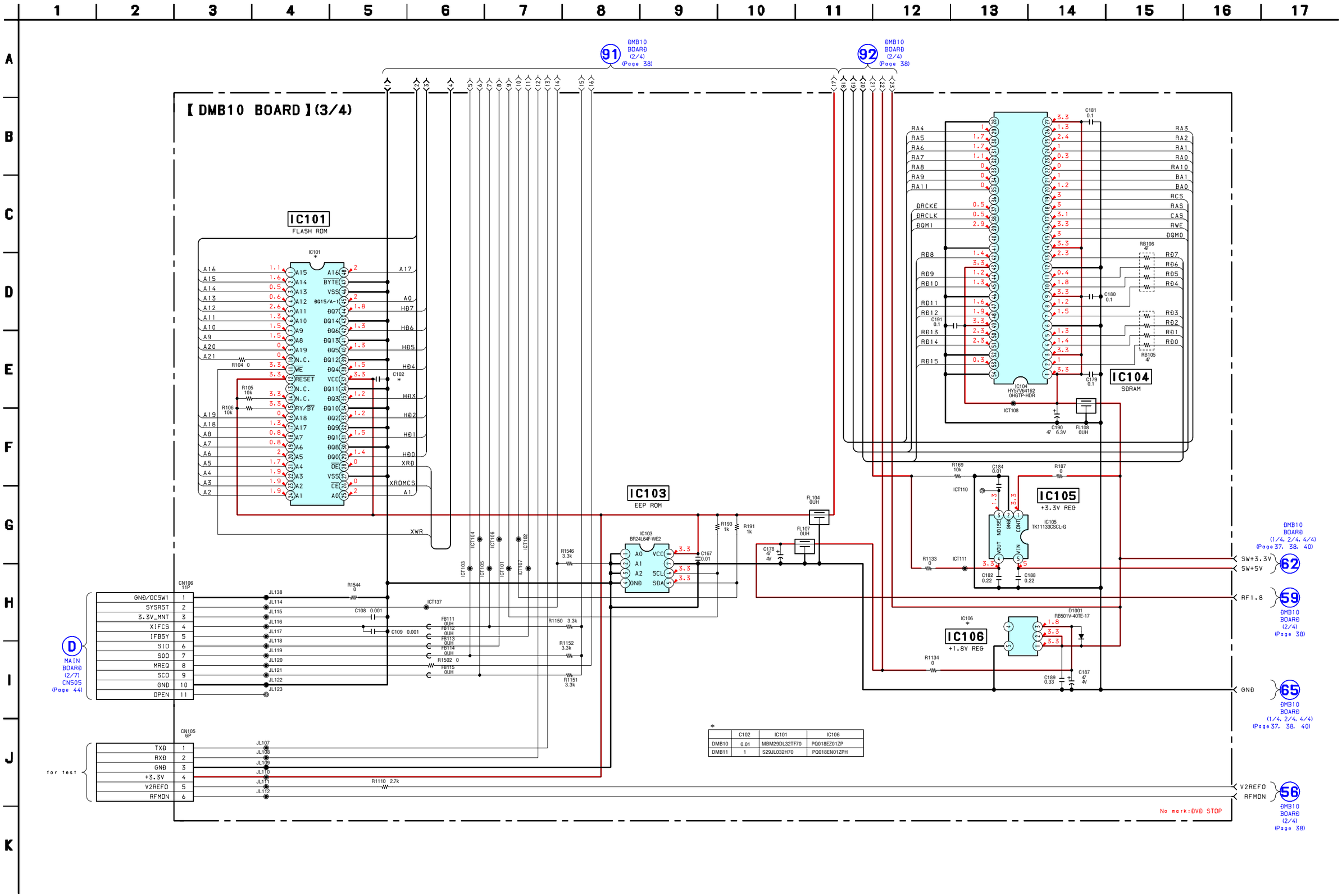
• See page 61 for IC Pin Function Description. • See page 54 for Waveforms.



	DMB10	DMB11
R1108	10k	0Ω
R1504	0Ω	F.B

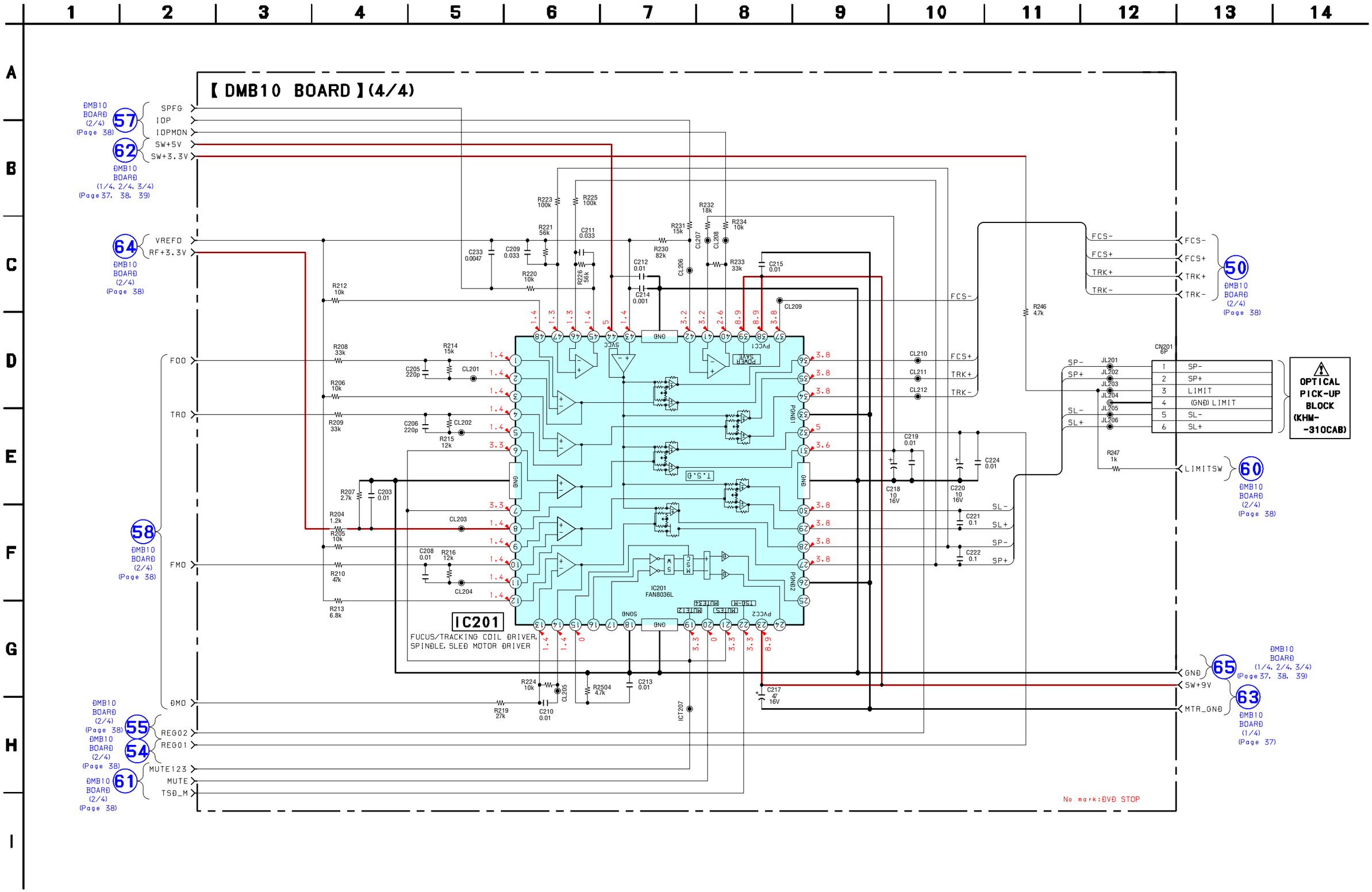
6-8. SCHEMATIC DIAGRAM – DMB10 SECTION (3/4) –

☆ New part of EEP ROM (IC103) on the DMB10 board or DMB11 board cannot be used. Therefore, if the mounted DMB10 board (A-1088-070-A, etc.) is replaced, exchange new EEP ROM (IC103) with that used before the replacement.



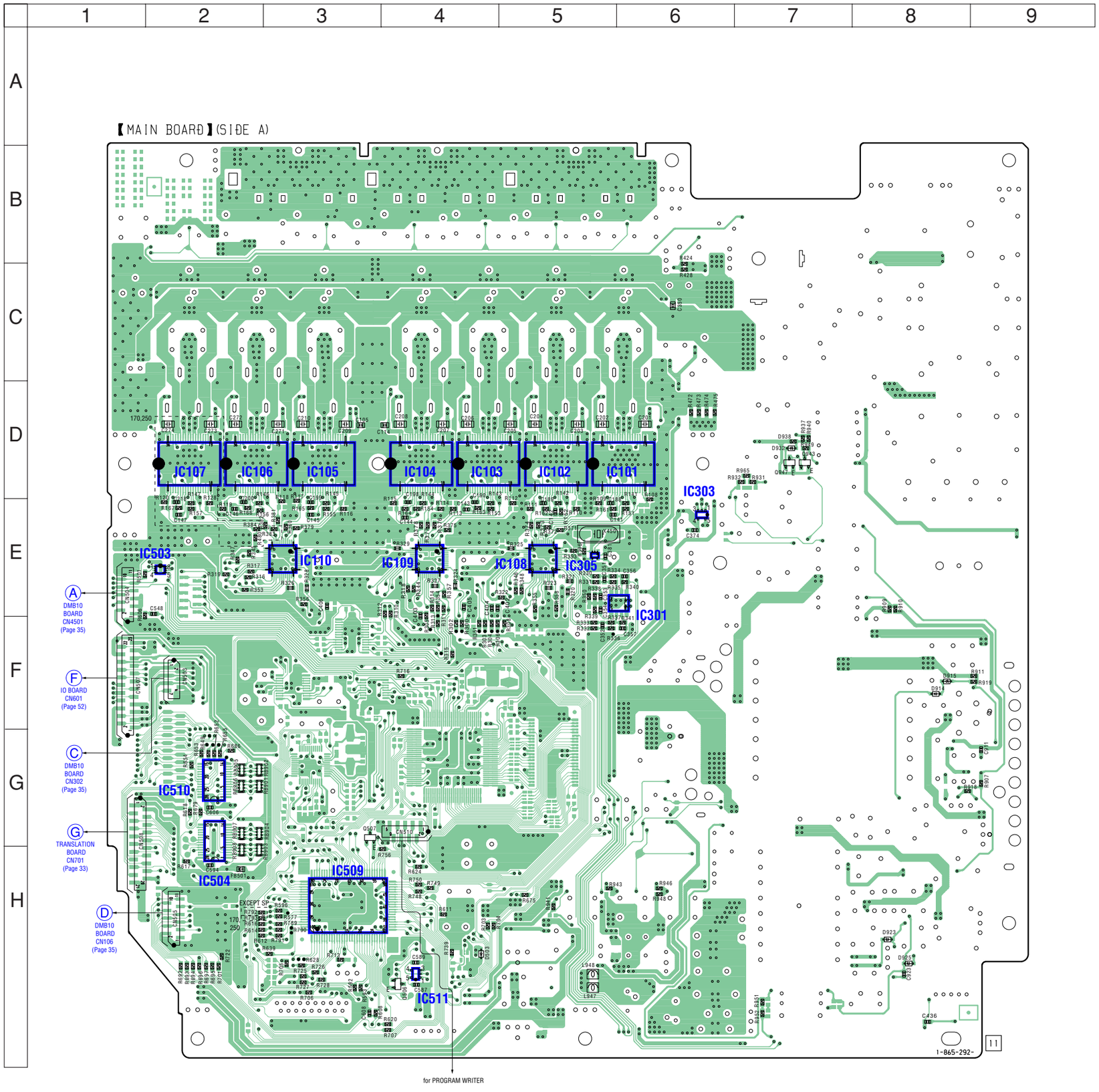
*	C102	IC101	IC106
DMB10	0.01	MBM29DL32TF70	PQ018EZ01ZP
DMB11	1	S29JL032H70	PQ018EN01ZPH

6-9. SCHEMATIC DIAGRAM – DMB10 SECTION (4/4) –



6-10. PRINTED WIRING BOARD – MAIN SECTION (SIDE A) –

• See page 27 for Circuit Boards Location. :Uses unleaded solder.

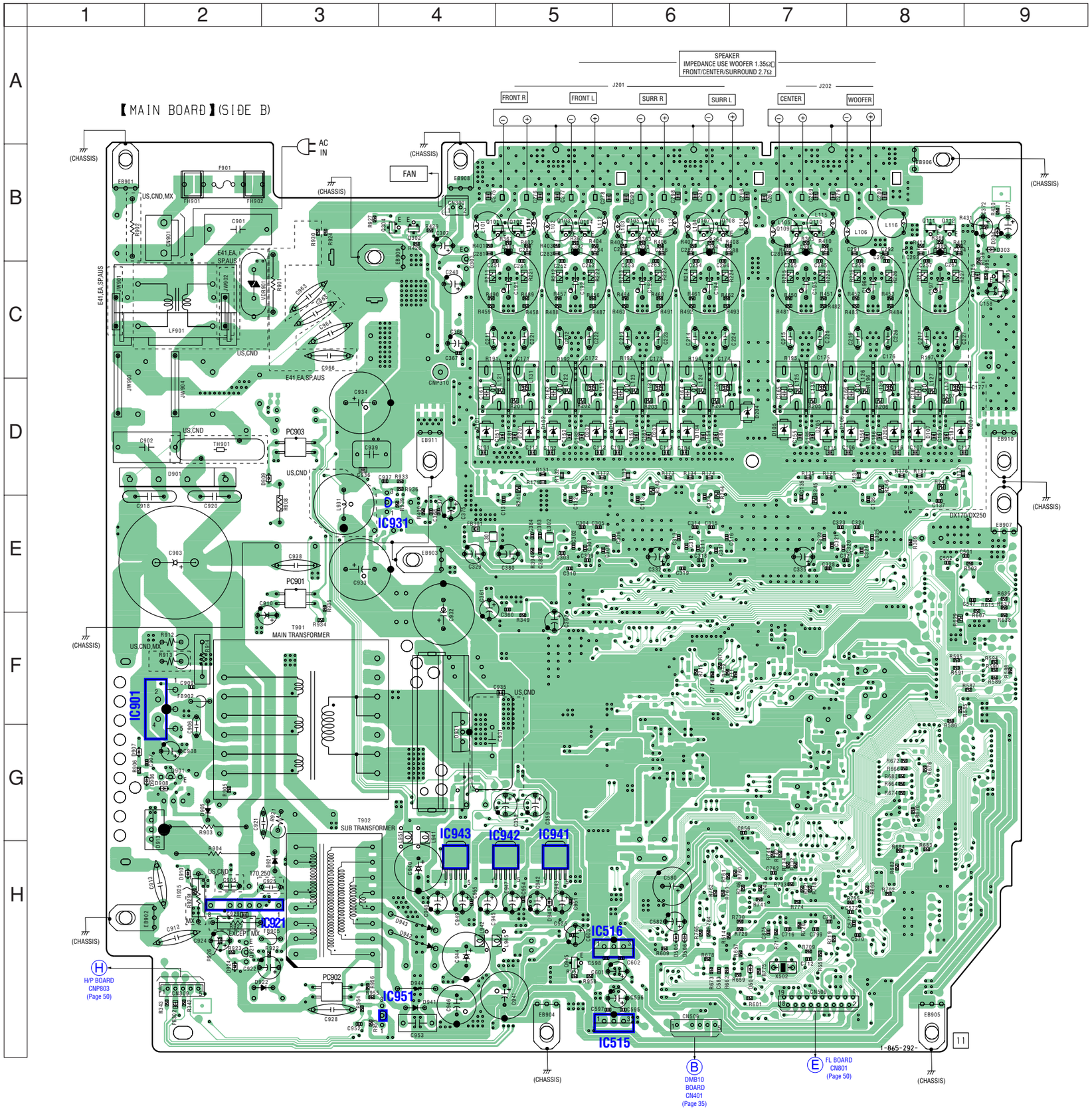


- **Semiconductor Location**

Ref. No.	Location
D503	H-4
D914	F-8
D915	F-8
D923	H-8
D925	H-8
D932	D-7
IC101	D-6
IC102	D-5
IC103	D-4
IC104	D-4
IC105	D-3
IC106	D-2
IC107	D-2
IC108	E-5
IC109	E-4
IC110	E-3
IC301	E-6
IC303	D-6
IC305	E-5
IC503	E-2
IC504	H-2
IC509	H-3
IC510	G-2
IC511	H-4
Q506	H-4
Q507	G-3
Q943	D-7
Q947	D-7

6-11. PRINTED WIRING BOARD – MAIN SECTION (SIDE B) –

• See page 27 for Circuit Boards Location. :Uses unleaded solder.

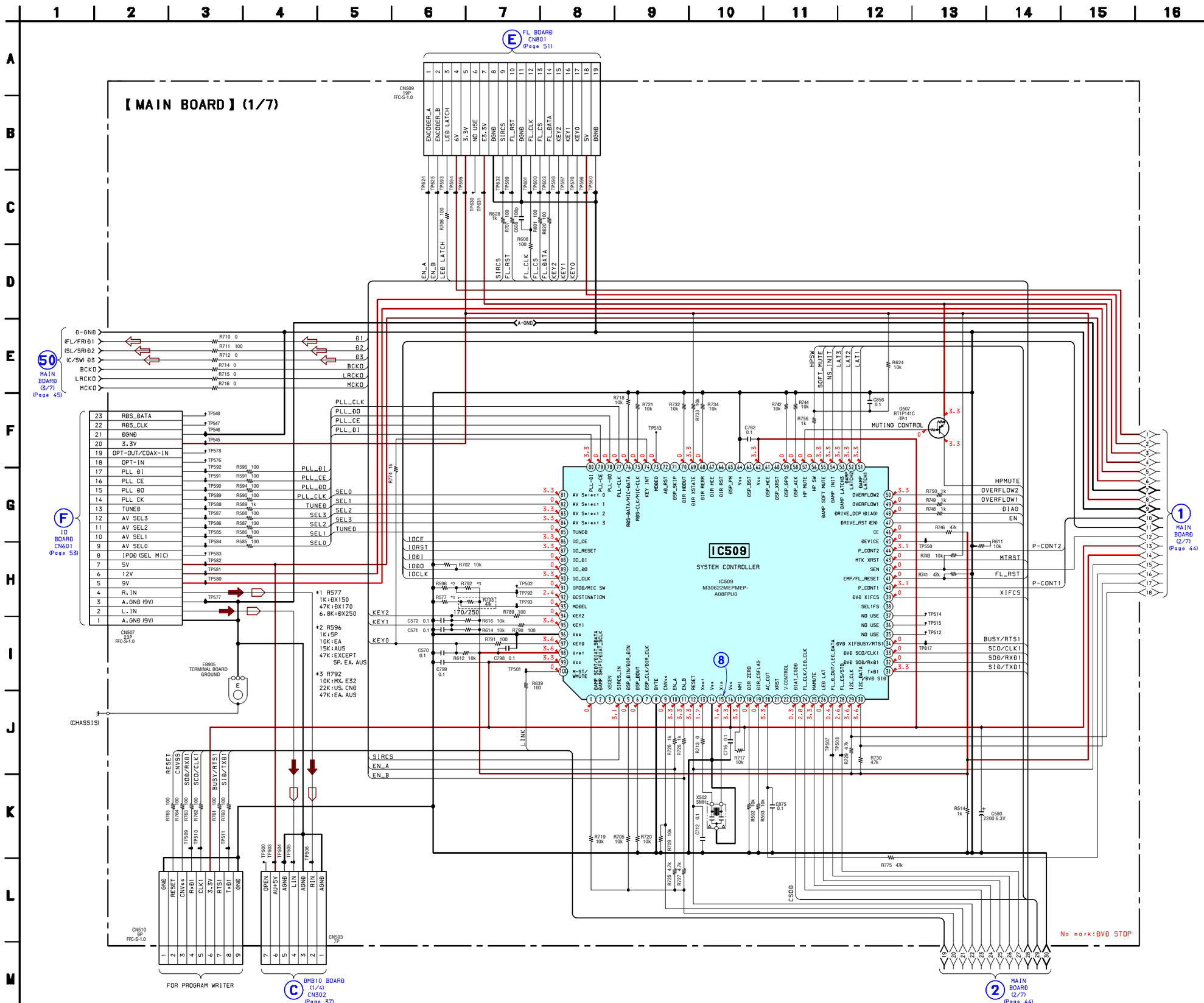


- **Semiconductor Location**

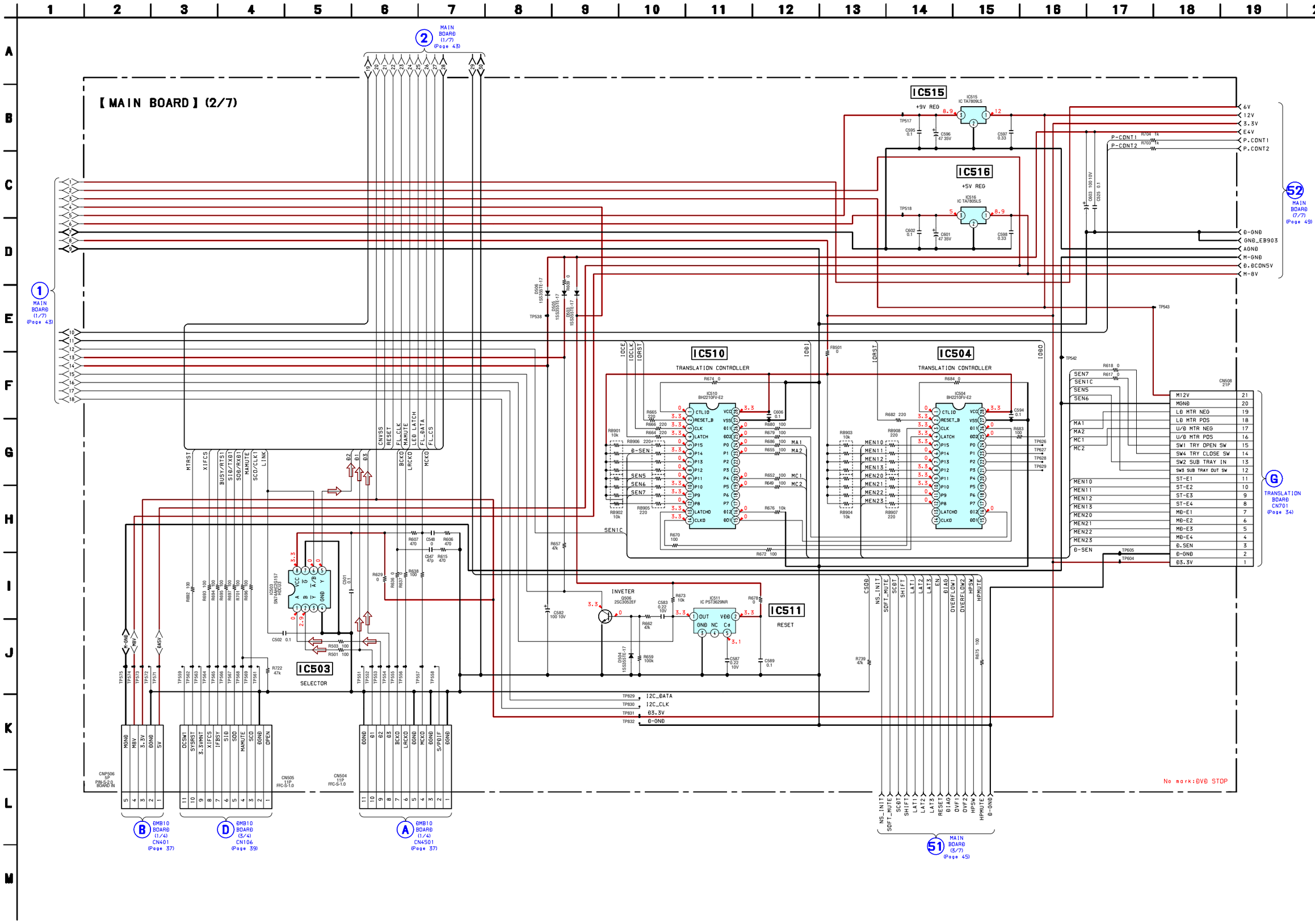
Ref. No.	Location
D101	D-4
D102	D-5
D103	D-6
D104	D-6
D105	D-7
D106	D-8
D107	D-8
D201	D-5
D202	D-5
D203	D-6
D204	D-7
D205	D-7
D206	D-8
D207	D-9
D303	B-9
D304	B-9
D504	H-7
D505	H-6
D506	H-6
D901	D-2
D905	G-2
D906	G-2
D907	G-1
D908	G-2
D909	D-3
D910	H-2
D913	G-2
D921	H-3
D922	H-3
D924	H-2
D931	F-4
D941	H-4
D942	H-4
D943	H-4
D944	H-4
D945	H-5
IC515	H-5
IC516	H-5
IC901	F-1
IC921	H-3
IC931	E-4
IC941	G-5
IC942	G-5
IC943	G-4
IC951	H-4
Q101	B-4
Q102	B-5
Q103	B-5
Q104	B-5
Q105	B-6
Q106	B-6
Q107	B-6
Q108	B-6
Q109	B-7
Q110	B-7
Q111	B-8
Q112	B-8
Q301	C-9
Q302	B-4
Q303	B-4
Q304	B-4
Q901	G-2
Q921	H-2
Q945	H-5

6-12. SCHEMATIC DIAGRAM – MAIN SECTION (1/7) –

• See page 58 for IC Pin Function Description. • See page 54 for Waveform.

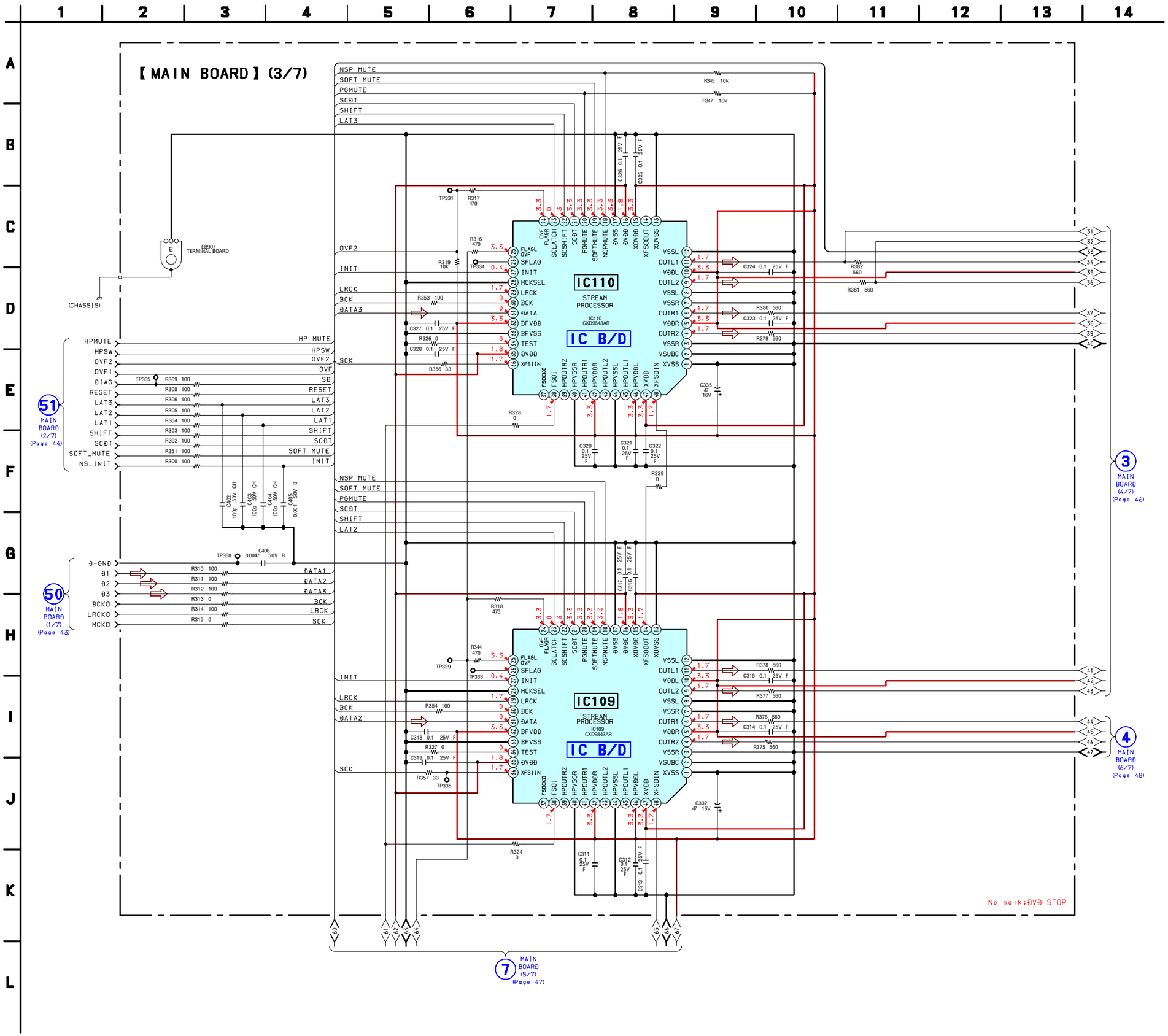


6-13. SCHEMATIC DIAGRAM – MAIN SECTION (2/7) –



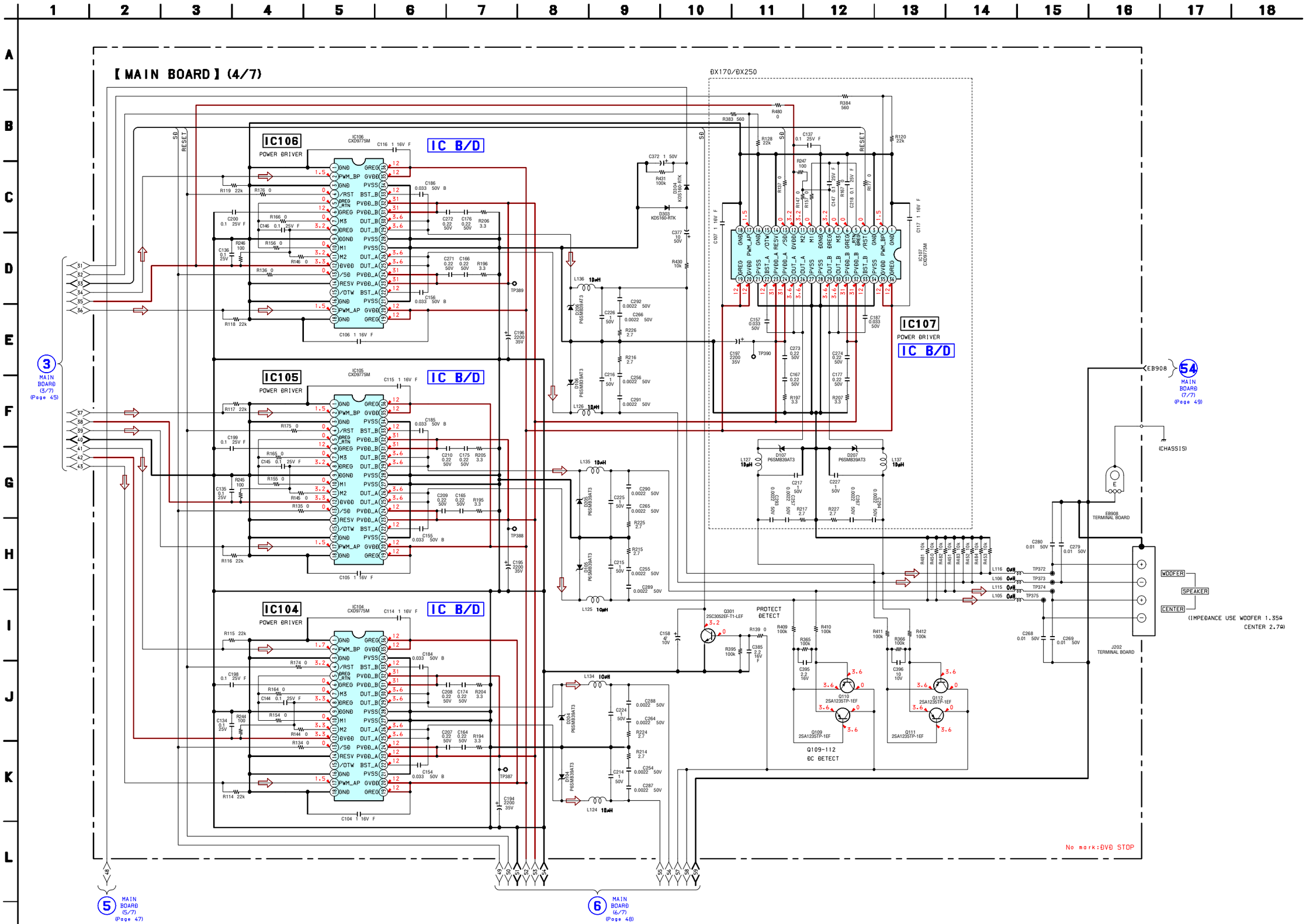
6-14. SCHEMATIC DIAGRAM – MAIN SECTION (3/7) –

• See page 55 for IC Block Diagrams.



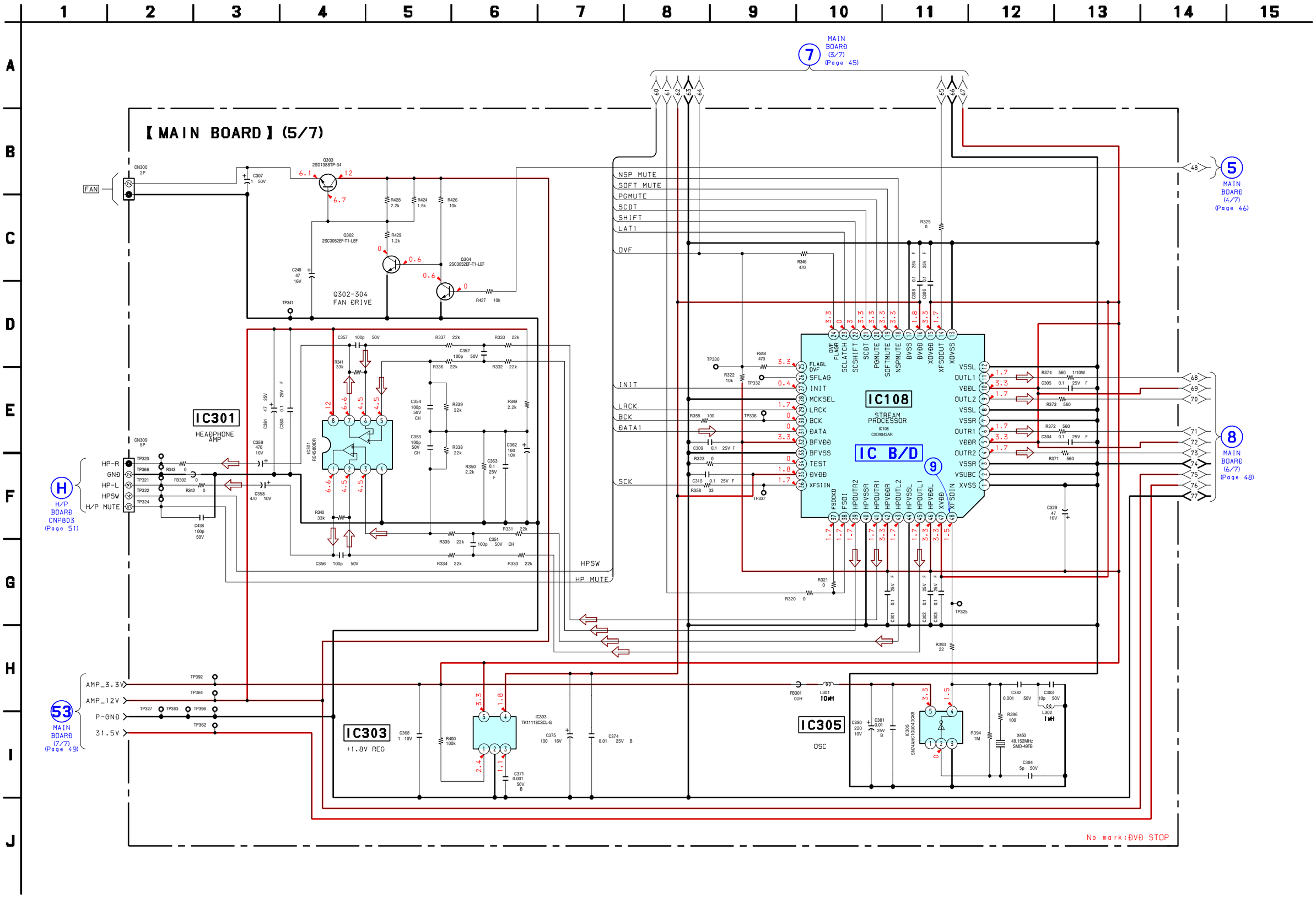
6-15. SCHEMATIC DIAGRAM – MAIN SECTION (4/7) –

• See page 55 for IC Block Diagrams.



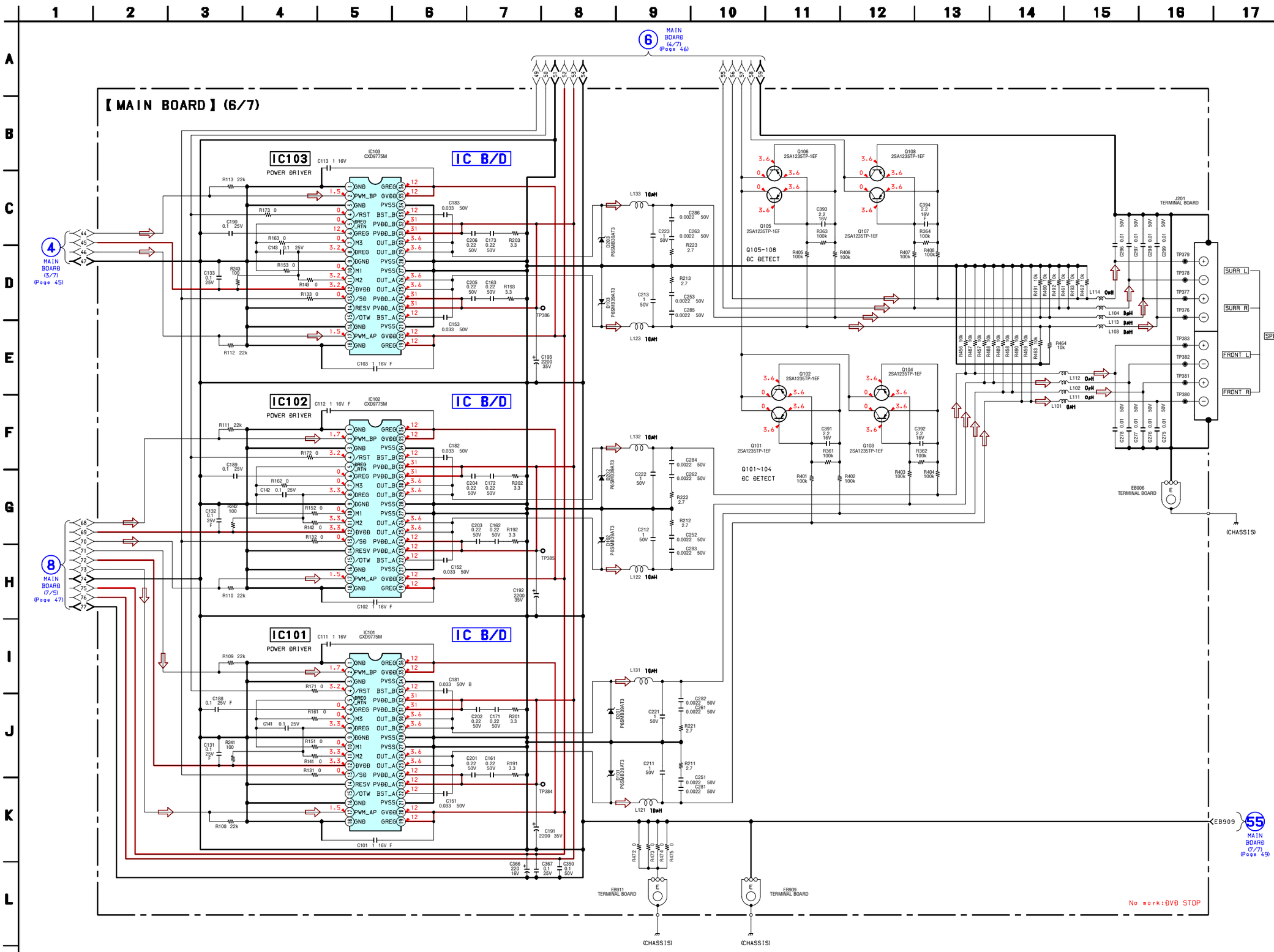
6-16. SCHEMATIC DIAGRAM – MAIN SECTION (5/7) –

• See page 55 for IC Block Diagram. • See page 54 for Waveform.

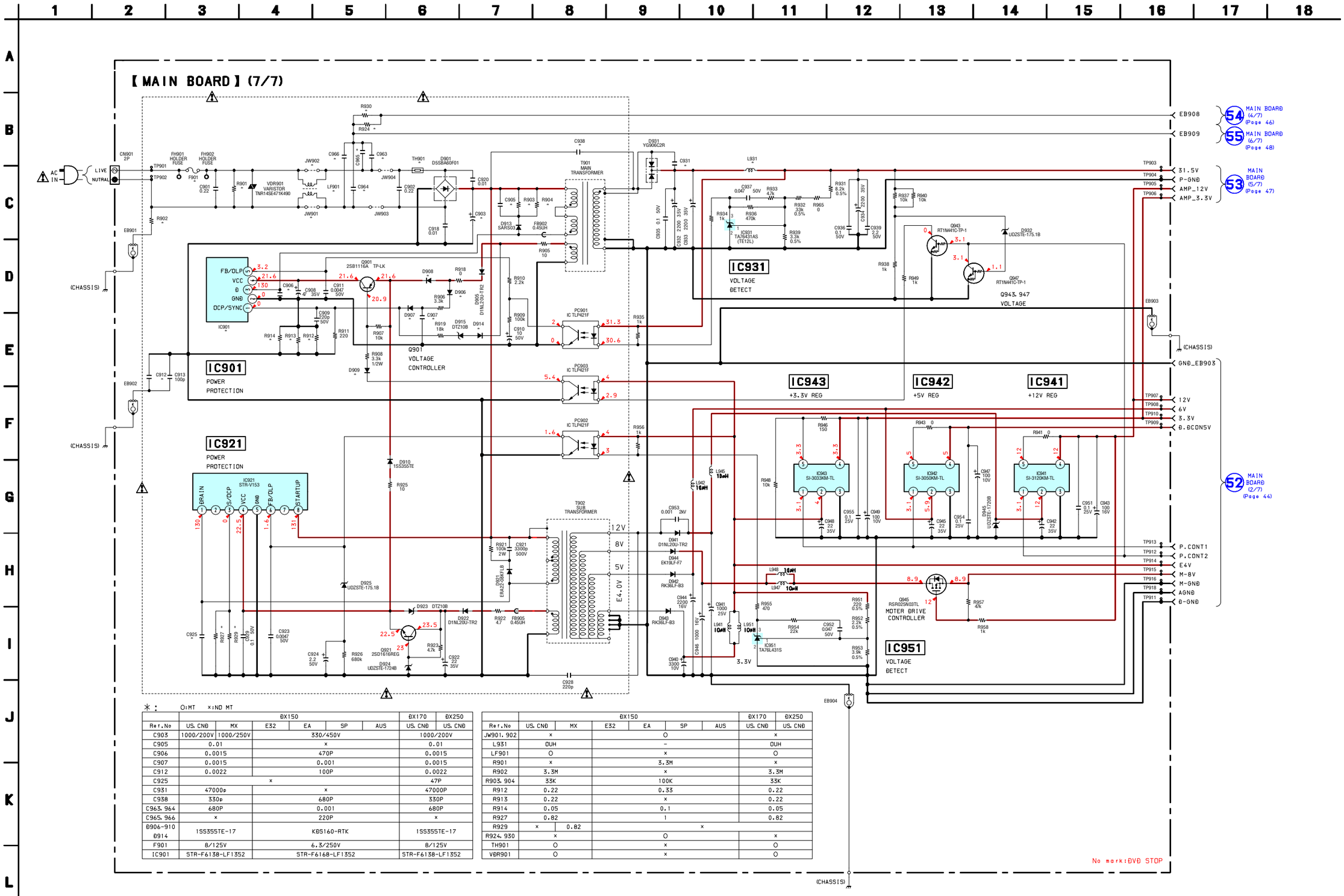


6-17. SCHEMATIC DIAGRAM – MAIN SECTION (6/7) –

• See page 55 for IC Block Diagrams.



6-18. SCHEMATIC DIAGRAM – MAIN SECTION (7/7) –



* : O:MT ×:NO MT

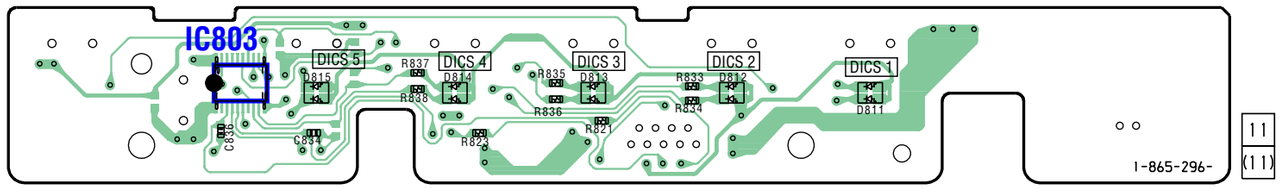
	DX150						DX170	DX250
Ref.No	US. CND	MX	E32	EA	SP	AUS	US. CND	US. CND
C903	1000/200V	1000/250V	330/450V				1000/200V	
C905	0.01		×				0.01	
C906	0.0015		470P				0.0015	
C907	0.0015		0.001				0.0015	
C912	0.0022		100P				0.0022	
C925	×						47P	
C931	47000p		×				47000P	
C938	330p		680P				330P	
C963. 964	680P		0.001				680P	
C965. 966	×		220P				×	
D906-910 D914	1SS355TE-17		KDS160-RTK				1SS355TE-17	
F901	8/125V		6.3/250V				8/125V	
IC901	STR-F6138-LF1352		STR-F6168-LF1352				STR-F6138-LF1352	

	DX150						DX170	DX250
Ref.No	US. CND	MX	E32	EA	SP	AUS	US. CND	US. CND
JW901. 902	×		O				×	
L931	0UH		-				0UH	
LF901	O		×				O	
R901	×		3.3M				×	
R902	3.3M		×				3.3M	
R903. 904	33K		100K				33K	
R912	0.22		0.33				0.22	
R913	0.22		×				0.22	
R914	0.05		0.1				0.05	
R927	0.82		1				0.82	
R929	×	0.82	×					
R924. 930	×		O				×	
TH901	O		×				O	
VDR901	O		×				O	

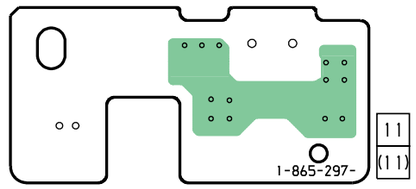
6-19. PRINTED WIRING BOARD – PANEL SECTION –

• See page 27 for Circuit Boards Location. :Uses unleaded solder.

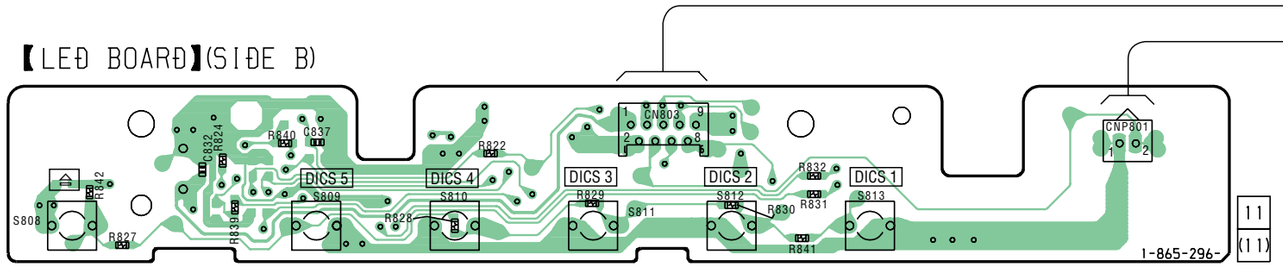
【LED BOARD】(SIDE A)



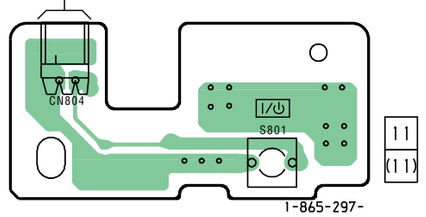
【STBY BOARD】(SIDE A)



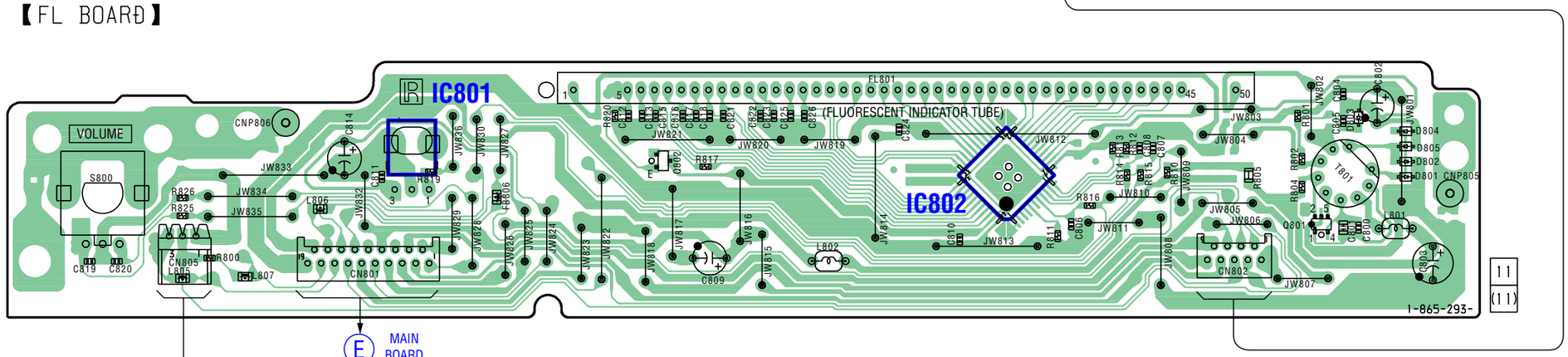
【LED BOARD】(SIDE B)



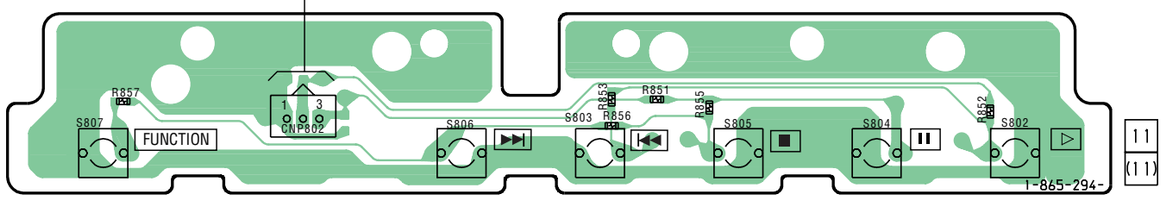
【STBY BOARD】(SIDE B)



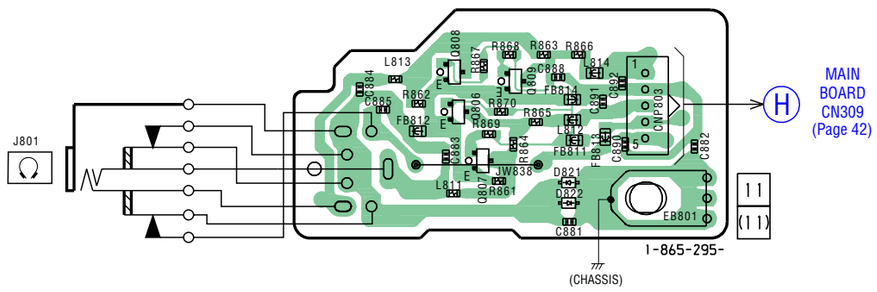
【FL BOARD】



【KEY BOARD】



【H/P BOARD】

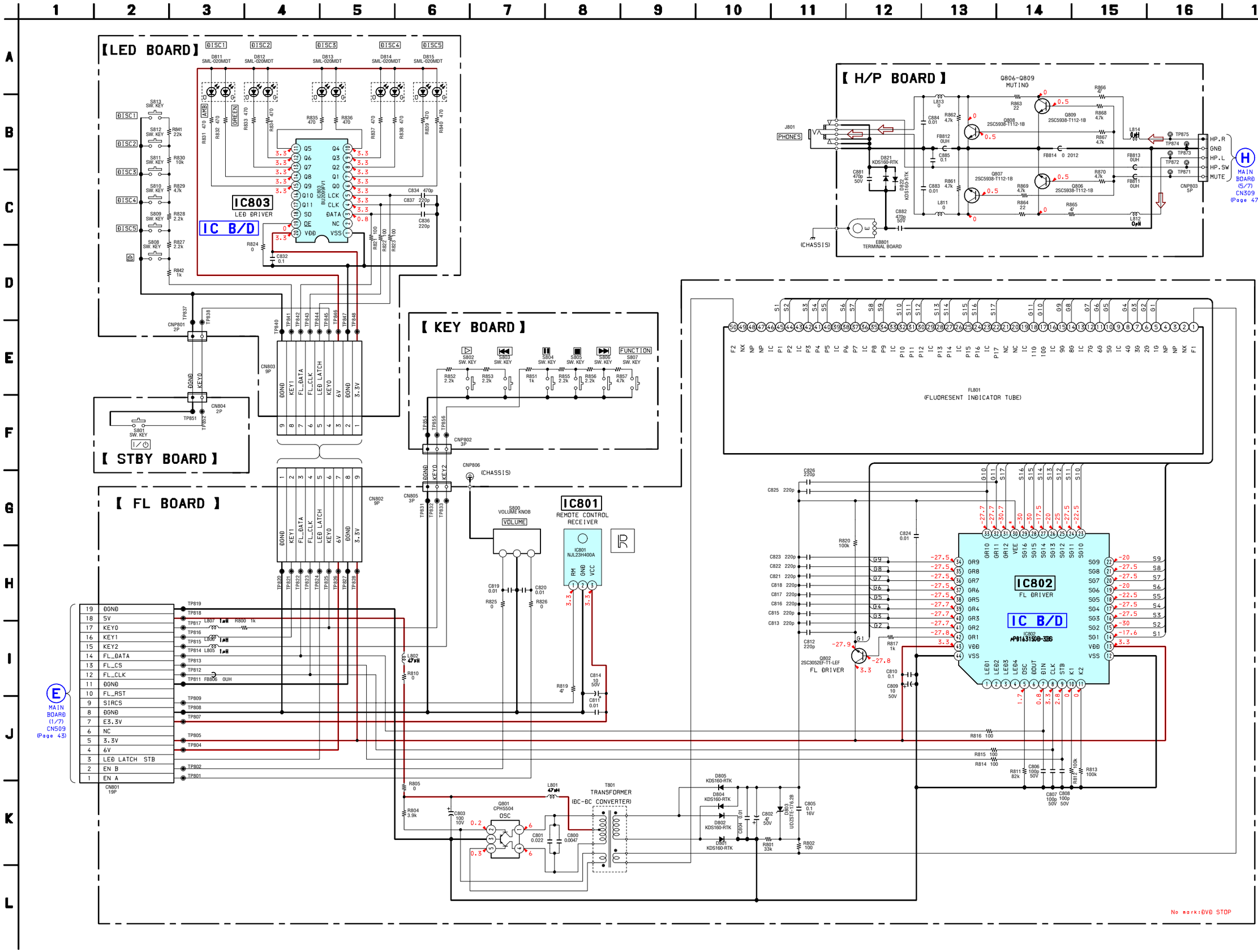


• **Semiconductor Location**

Ref. No.	Location
D801	D-8
D802	D-8
D803	D-8
D804	D-8
D805	D-8
D811	A-4
D814	A-3
D815	A-2
D821	F-8
D822	F-8
IC801	D-3
IC802	D-6
IC803	A-2
Q801	D-7
Q802	D-4
Q806	F-8
Q807	F-8
Q808	F-8
Q809	F-8

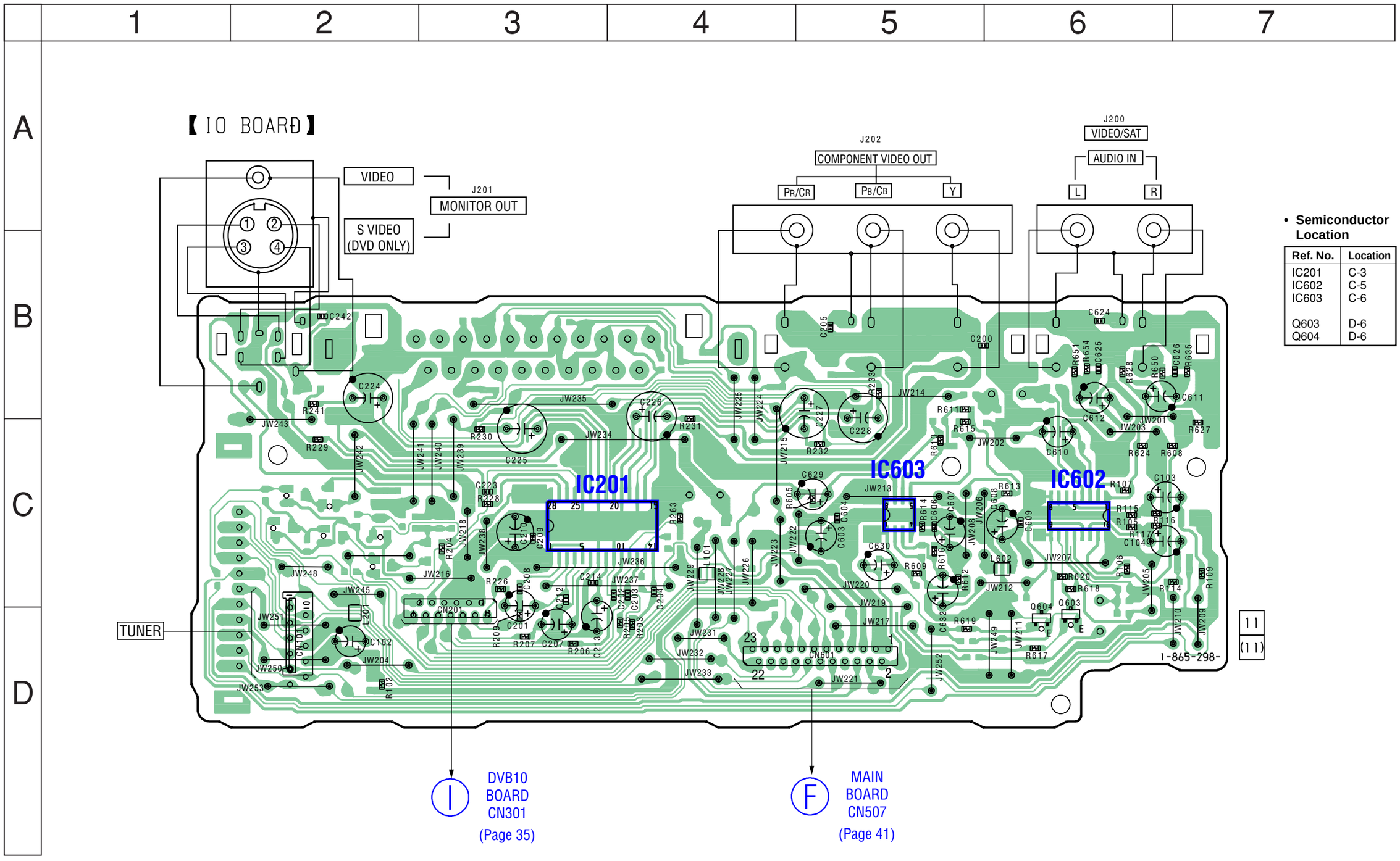
6-20. SCHEMATIC DIAGRAM – PANEL SECTION –

• See page 54, 56 for IC Block Diagrams.



6-21. PRINTED WIRING BOARD – IO SECTION –

• See page 27 for Circuit Boards Location. :Uses unleaded solder.

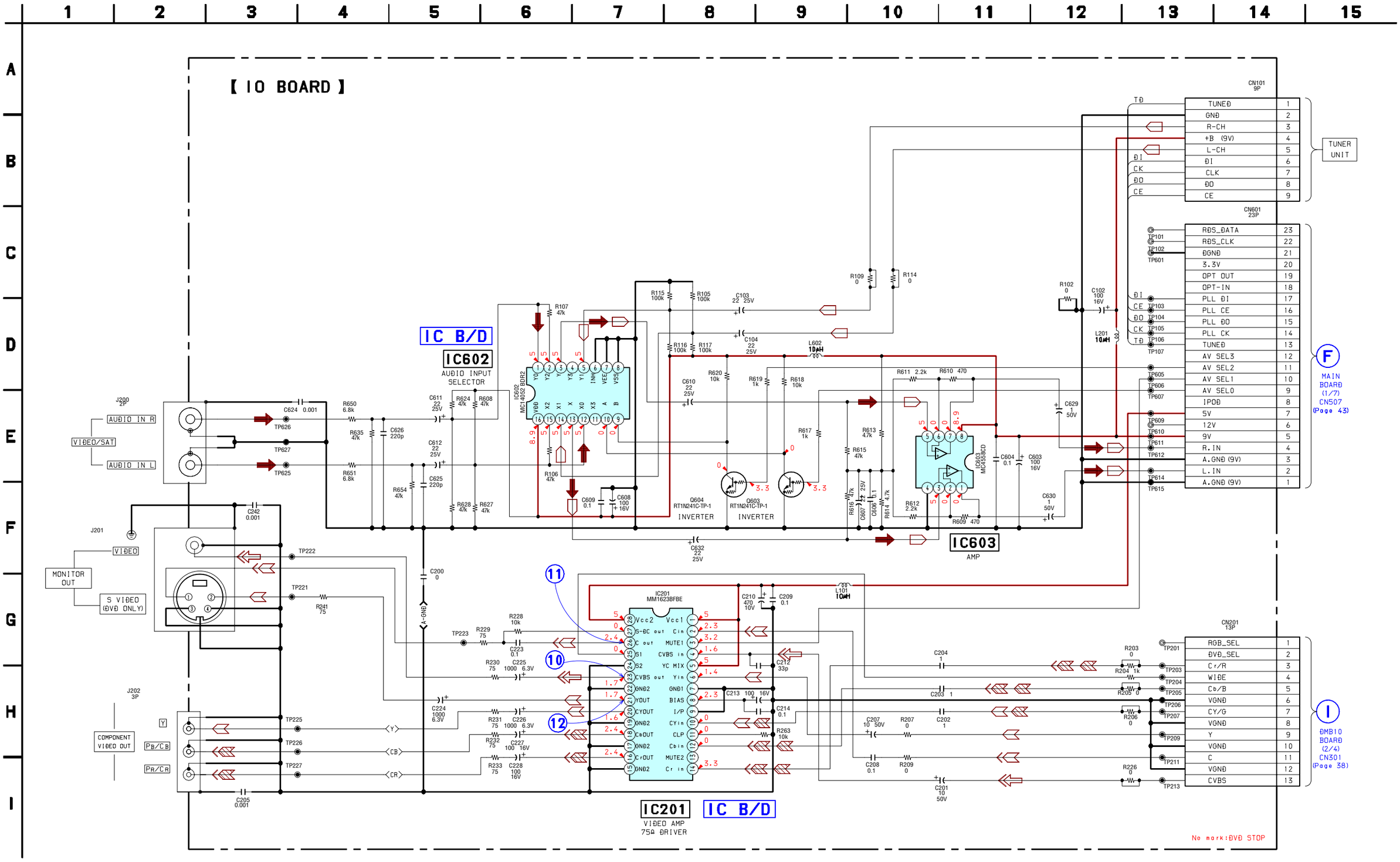


- **Semiconductor Location**

Ref. No.	Location
IC201	C-3
IC602	C-5
IC603	C-6
Q603	D-6
Q604	D-6

6-22. SCHEMATIC DIAGRAM – IO SECTION –

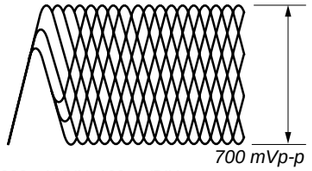
• See page 57 for IC Block Diagrams. • See page 54 for Waveforms.



• **Waveforms**

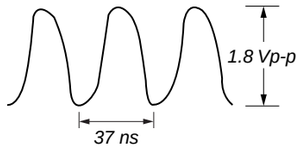
– DMB10 Board –

① IC102 ⑥ (DVDRFIP)



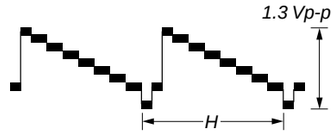
200 mV/DIV, 100 ns/DIV

④ IC102 ㉒⑨(XTALI)



1 V/DIV, 10 ns/DIV

⑦ IC102 ⑲④(YUV1)

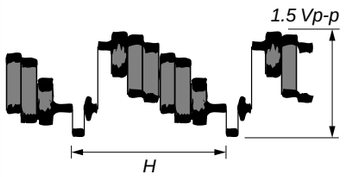


500 mV/DIV, 20 µs/DIV

② IC102 ㉜ (TEO)

500 mV/DIV, 1 ms/DIV

⑤ IC102 ⑲⑧(YUV3)

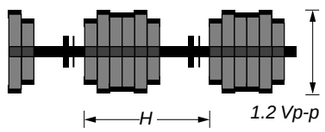


500 mV/DIV, 20 µs/DIV

③ IC102 ㉛ (FED)

100 mV/DIV, 1 ms/DIV

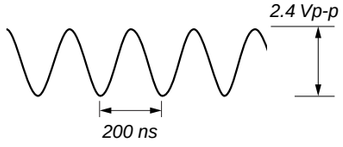
⑥ IC102 ⑲⑥(YUV2)



500 mV/DIV, 20 µs/DIV

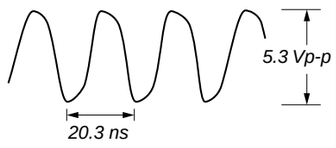
– MAIN Board –

⑧ IC509 ⑮ (Xin)



1 V/DIV, 100 ns/DIV

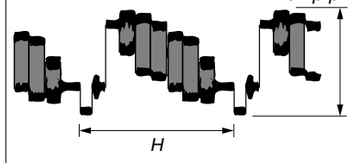
⑨ IC108 ㊽ (XFSOIN)



1 V/DIV, 10 ns/DIV

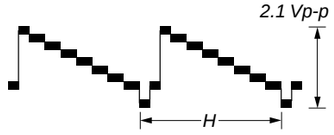
– IO Board –

⑩ IC201 ㉓ (CVBS OUT)



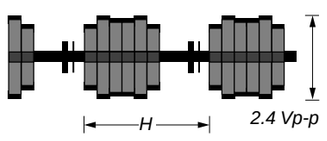
1 V/DIV, 20 µs/DIV

⑫ IC201 ㉑ (YOUT)



1 V/DIV, 20 µs/DIV

⑪ IC201 ㉖ (COUT)

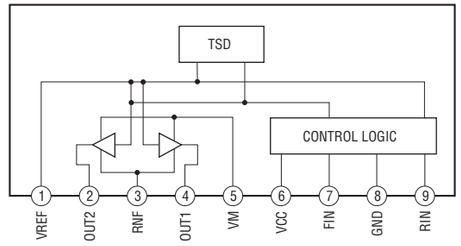


1 V/DIV, 20 µs/DIV

• **IC Block Diagrams**

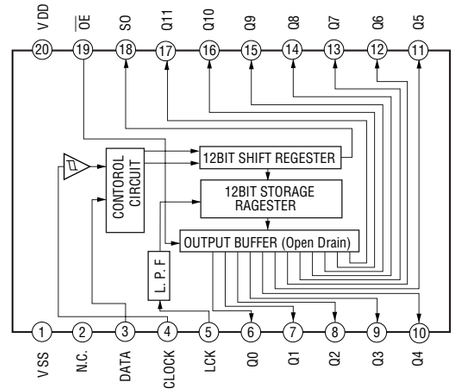
– TRANSLATION Board –

IC701, 711 BA6956AN



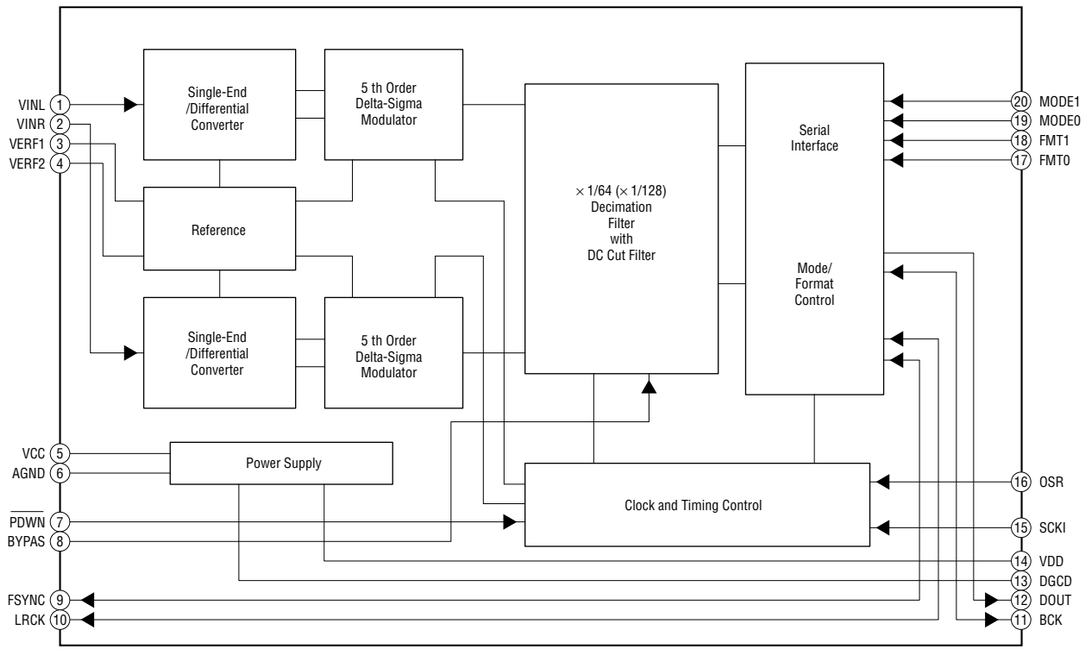
– LED Board –

IC803 BU2099FV



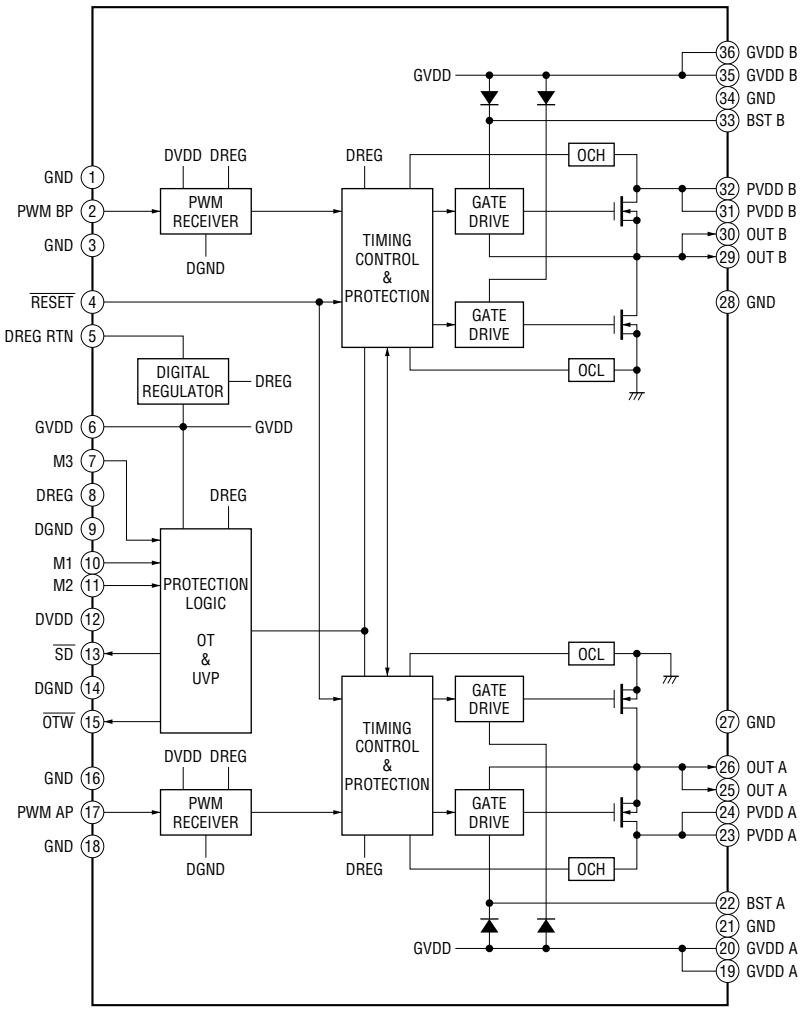
– DMB10 Board –

IC3601 PCM1803DBR

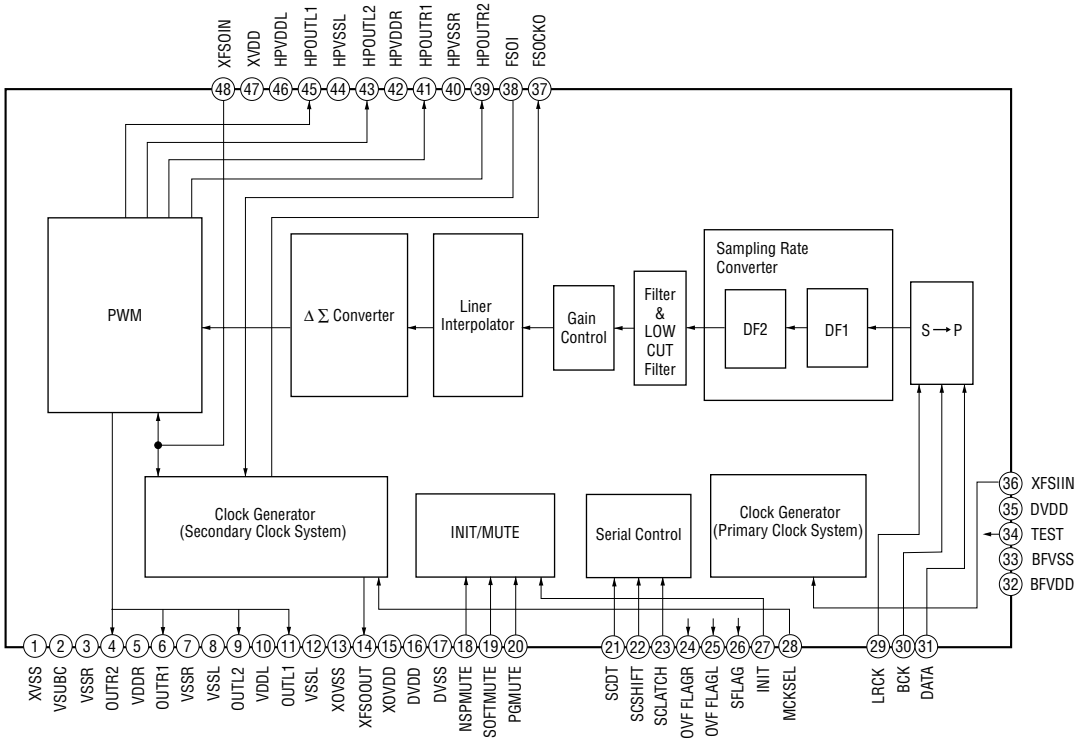


– MAIN Board –

IC101-107 CXD9775M

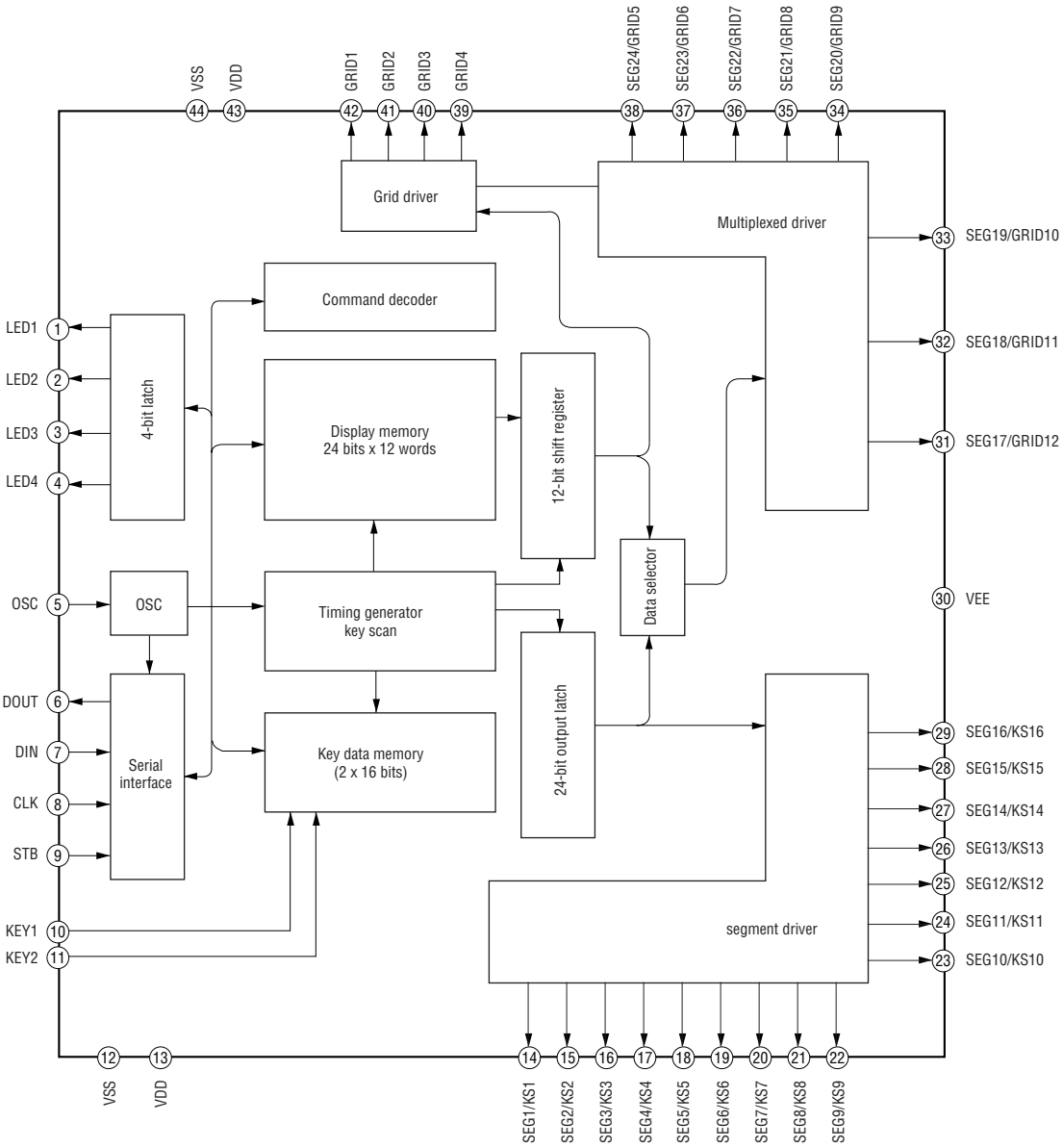


IC108, 109, 110 CXD9843AR



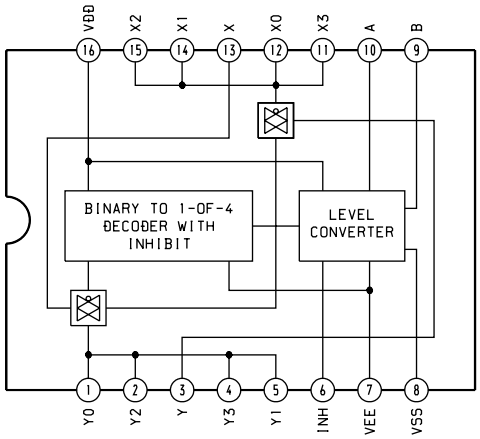
– FL Board –

IC802 uPD16315GB-3BS

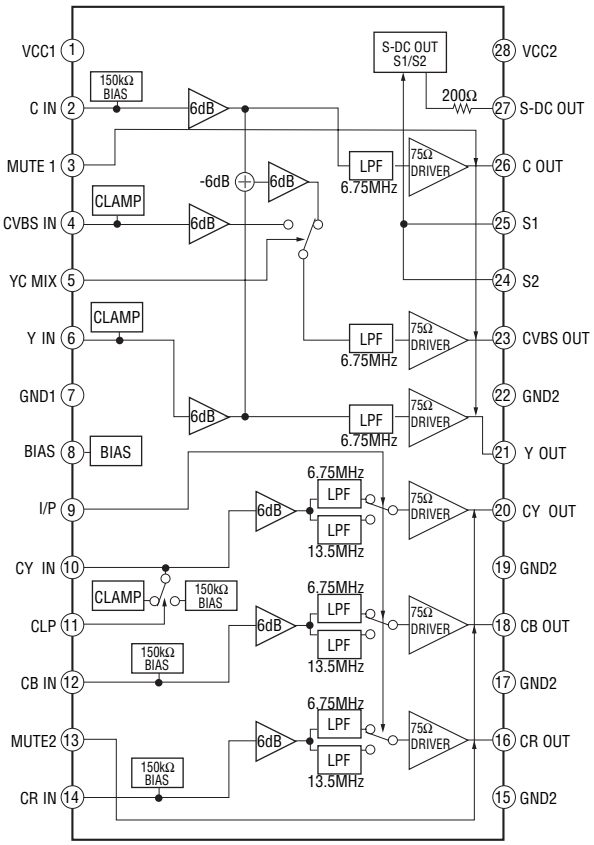


– IO Board –

IC602 MC14052BDR2



IC201 MM1623BFBE



• IC Pin Function Description

MAIN BOARD IC509 M30622MEP-A08FPUO (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	DAMP SCDT/DIAT SDATA	O	Digital amp (IC108 to 110) data output
2	DAMP SHIFT/DIAT SCLK	O	Digital amp (IC108 to 110) data output
3	XSCEN	O	Voltage control for amp (not used)
4	SIRCS_IN	I	Sircs input
5	DSP DIN/DIR DIN	O	DSP /DIR data out (not used)
6	DSP DOUT	I	DSP data in (not used)
7	DSP CLK/DIR CLK	O	DSP/DIR clock (not used)
8	BYTE	—	Ground terminal
9	CNVSS	I	Ground terminal
10	EN A	I	Volume signal input from ENCODER (A)
11	EN B	I	Volume signal input from ENCODER (B)
12	RESET	I	System reset signal input
13	XOUT	O	Crystal input for main cock
14	VSS	—	Ground terminal
15	XIN	I	Crystal output for main clock
16	VCC	—	Power supply (+3.3V)
17	NMI	I	Not used
18	DIR ZERO	I	DIR zero in (not used)
19	DIR_CSFLAG	I	DIR csflag in (not used)
20	AC_CUT	I	Detect AC-CUT (primary power off)
21	XRST	O	XRST signal output (not used)
22	V-CONTROL	O	Voltage control output (not used)
23	DIAT CSOD	I	DIAT CSOB signal output (not used)
24	FL_CLK/LED_CLK	O	FL driver (IC802) / LED driver (IC803) clock
25	MAMUTE	I	MAMUTE Signal input from DVD RF (IC102)
26	LED LAT	O	LED driver latch
27	FL_D_OUT/LED_DATA	O	FL driver (IC802) / LED Driver (IC803) data out
28	FL_CS/STB	O	FL driver (IC802) chip select
29	12C CLK	I	12C clock input
30	12C DATA	I	12C data input
31	DVD SID/TXDI	O	SID data output to DVD RF (IC102)
32	DVD SOD/RXDI	I	SOD data iutput from DVD RF (IC102)
33	DVD SCO/CLK1	I	Clock signal input from DVD RF (IC102)
34	DVD XIFBUSY/RTS1	O	IFBUSY signal output to DVD RF (IC102)
35	(NO USE)	—	Not used
36	(NO USE)	—	Not used
37	(NO USE)	—	Not used
38	SEL1FS	—	DIR_SELECT/Flash Write RTS1 (not used)
39	DVD XIFCS	O	DVD RF (IC102) chip select signal
40	P CONT1	O	IC REG control signal
41	EMP/FL RESET	O	Not used
42	SEN	O	OCSW signal output (not used)
43	MTK XRST	O	DVD reset signal
44	P CONT2	O	IC REG control signal
45	DEVICE	O	Not used
46	CE	O	Flash Write CE (not used)
47	DRIVE_RST(EN)	O	Driver signal reset

Pin No.	Pin Name	I/O	Description
48	DRIVE_OCP(DIAG)	I	Digital amp (power driver) diag
49	OVERFLOW1	I	Over flow status1 of digital amp (IC110)
50	OVERFLOW2	I	Over flow status2 of digital amp (IC108 to 110)
51	DAMP LATCH1	O	Digital amp (IC108) chip select1 signal output
52	DAMP LATCH2	O	Digital amp (IC109) chip select2 signal output
53	DAMP LATCH3	O	Digital amp (IC110) chip select3 signal output
54	DAMP INIT	O	Digital amp (IC108 to 110) reset signal output
55	DAMP SOFT MUTE	O	Digital amp (IC108 to 110) soft muting output
56	HP SW	I	Switch headphone is insert
57	HP MUTE	O	Control of muting headphone signal
58	DSP_ACK	I	DSP acknowledge (not used)
59	DSP_GP9	I	DSP GP9 in (not used)
60	DSP_XRST	O	DSP reset (not used)
61	DSP_HCE	O	DSP chip enable (not used)
62	VCC	—	Power supply (+3.3V)
63	DSP_BST	O	DSP bootstrap (for DSP INIT) (not used)
64	VSS	—	Ground terminal
65	DSP_PM	O	DSP pll initial (not used)
66	DIR RST	O	DIR reset out (not used)
67	DIR HCE	O	DIR chip enable signal output (not used)
68	DIR RERR	I	DIR error input (not used)
69	DIR XSTATE	I	DIR change clock status (not used)
70	DIR HDOUT	I	DIR Data input (not used)
71	DSP_SKIP	O	DSP GP12 (not used)
72	AD RST	O	ADC reset (not used)
73	MODEO	—	Not used
74	KEY INT	I	Wakeup from ECO mode by key input
75	RDS-CLK/MIC-CLK	O	Not used
76	RDS-DATA/MIC-DATA	O	Not used
77	PLL-CLK	O	Tuner clock
78	PLL-DO	O	Tuner data out (uCOM→pack)
79	PLL-CE	O	Tuner chip enable
80	PLL-DI	I	Tuner data in (pack→uCOM)
81	AV SELECT 0	O	Audio/Video select0
82	AV SELECT 1	O	Audio/Video select1
83	AV SELECT 2	O	Audio/Video select2
84	AV SELECT 3	O	Audio/Video select3 (not used)
85	TUNED	I	Tuner pack tuned in
86	IO_CE	O	I/O expander chip enable / control of loading cd tray (open action)
87	IO_RESET	O	I/O expander reset / control of loading cd tray (close action)
88	IO_DI	I	I/O expander data in / SW2 of CDM
89	IO_DO	O	I/O expander data out / SW3 of CDM
90	IO_CLK	O	I/O expander clock
91	IPOD/MIC SW	I	Not used
92	DESTINATION	I	Destination select
93	MODEL	I	Model select
94	KEY2	I	Key input 2

Pin No.	Pin Name	I/O	Description
95	KEY1	I	Key input 1
96	VSS	—	Ground
97	KEY0	I	Key input 0
97	DESTINATION	I	Destination select
98	VREF	I	Reference Voltage (+3.3V)
99	VCC	I	Power supply (+3.3V)
100	M-ST/WMUTE	O	Selector (IC503) WMUTE signal

DMB10 BOARD IC102 CXD9804R
(CD/DVD RF AMP, FOCUS/TRACKING ERR AMP, DVD SYSTEM PROCESSOR, DIGGITAL SERVO PROCESSOR)

Pin No.	Pin Name	I/O	Description
1	AGND	—	Terminal Ground
2	DVDA	I	AC coupled input path A
3	DVDB	I	AC coupled input path B
4	DVDC	I	AC coupled input path C
5	DVDD	I	AC coupled input path D
6	DVDRFIP	I	AC coupled DVD RF signal input RFIP
7	DVDRFIN	I	AC coupled DVD RF signal input RFIN (not used)
8	MA	I	DC coupled main-beam RF signal input A
9	MB	I	DC coupled main-beam RF signal input B
10	MC	I	DC coupled main-beam RF signal input C
11	MD	I	DC coupled main-beam RF signal input D
12	SA	I	DC coupled sub-beam RF signal input A (not used)
13	SB	I	DC coupled sub-beam RF signal input B (not used)
14	SC	I	DC coupled sub-beam RF signal input C (not used)
15	SD	I	DC coupled sub-beam RF signal input D (not used)
16	CDFON	I	CD focusing error negative input (not used)
17	CDFOP	I	CD focusing error positive input (not used)
18	TNI	I	3 beam satellite PD signal negative input
19	TPI	I	3 beam satellite PD signal positive input
20	MDI1	I	Laser power PD monitor input
21	MDI2	I	Laser power PD monitor input
22	LDO2	O	Laser drive output
23	LDO1	O	Laser drive output
24	SVDD3	—	Power Supply (+3.3V)
25	CSO	O	Central servo, Positive main beam summing output (not used)
26	RFLVL	O	RFRP low pass, or Positive main beam summing output (not used)
27	SGND	—	Terminal Ground
28	V2REFO	O	Reference voltage 2.8V
29	V2O	O	Reference voltage 2.0V
30	VREFO	O	Reference voltage 1.4V
31	FEO	O	Focus error monitor output
32	TEO	O	Tracking error monitor output
33	TEZISLY	O	TE Slicing Level (not used)
34	OPOUT	O	Op amp output (not used)
35	OPINN	I	Op amp negative input (not used)
36	OPINP	I	Op amp positive input (not used)
37	DMO	O	Disk motor control output.PWM output
38	FMO	O	Feed motor control.PWM output
39	TROPENPWM	O	Tray PWM output/Tray open output.
40	IOPMON	O	General PWM output
41	TRO	O	Tracking servo output
42	FOO	O	Focus servo output
43	USBVSS	—	Terminal Ground
44	USBP	I	USB port DPLUS analog pin
45	USBM	I	USB port DMINUS analog pin
46	USBVDD3	—	Power Supply (+3.3V)
47	SPFGG	I	Moter Hall sensor input

Pin No.	Pin Name	I/O	Description
48	AN0	I	Not Used
49	AN1	I	Not Used
50	AN2	I	Not Used
51	MAMUTE	O	MAMUTE signal output to System Controller (IC509)
52	DVDD18	—	Power Supply (+1.8V)
53 to 58	IOA 2 to 7	O	Address bus 2 to 7 output to PROM (IC101)
59	HIGHA0	O	Address bus 8 output to PROM (IC101)
60, 61	IOA18, 19	O	Address bus 18, 19 output to PROM (IC101)
62	DVSS	—	Terminal Ground
63	APLLCAP	I	APLL External Capacitance connection
64	APLLVSS	—	Terminal Ground
65	DVDD3	—	Power Supply (+3.3V)
66	I OWA	O	WE signal output to PROM (IC101)
67	A16	O	Address bus 16 output to PROM (IC101)
68 to 72	HIGHA 7 to 3	O	Address bus 15 to 11 output to PROM (IC101)
73	DVDD3	—	Power Supply (+3.3V)
74, 75	HIGHA 2, 1	O	Address bus 10, 9 output to PROM (IC101)
76	IOA20	O	Address bus 20 output to PROM (IC101)
77	IOCS	O	CE signal output to PROM (IC101)
78	IOA1	O	Address bus 1 output to PROM (IC101)
79	IOOE	O	OE signal output to PROM (IC101)
80	DVDD3	—	Power Supply (+3.3V)
81 to 84	AD 0 to 3	I	Data bus 0 to 3 input from PROM (IC101)
85	DVSS	—	Terminal Ground
86 to 88	AD 4 to 6	I	Data bus 4 to 6 input from PROM (IC101)
89	IOA21	O	Address bus 21 output to PROM (IC101)
90	ALE	O	Address latch enable (not used)
91	AD7	I	Data bus 7 input from PROM (IC101)
92	A17	O	Address bus 17 output to PROM (IC101)
93	IOA0	O	Address bus 0 output to PROM (IC101)
94	DVSS	—	Terminal Ground
95	UWA	I	System Controller write strobe (not used)
96	URB	I	System Controller read strobe (not used)
97	DVDD18	—	Power Supply (+1.8V)
98	IFSDO	I	DVD SOD signal input from System Controller (IC509)
99	IFCK	O	DVD SCO signal output to System Controller (IC509)
100	XIFCS	I	DVD XIFCS signal input from System Controller (IC509)
101	IFSDI	I	VIFBUSY signal output from System Controller (IC509)
102	SCL	O	SCL signal output to EEPROM (IC103)
103	SDA	O	SDA signal output to EEPROM (IC103)
104	TRG-SW	O	RS232 RXD signal output
105	IF-BSY	I	RS232 TXD signal input from System Controller (IC509)
106	RXD	I	RD232 RXD clock
107	TXD	I	RD232 TXD data
108	DVDD3	—	Power Supply (+3.3V)
109	IEC	I	ICE mode enable (not used)
110	PRST	I	MTRST signal input from System Controller (IC509)

Pin No.	Pin Name	I/O	Description
111	IR	I	IR control signal input (not used)
112	INT0	I	External interrupt0 (not used)
113	DQMO	O	DQM0 signal output to SD-RAM (IC104)
114	DQS0	I	DQM signal input
115	RD7	I	Data bus 7 from SD-RAM (IC104)
116	DVSS	—	Terminal Ground
117, 118	RD 6, 5	I	Data bus 6, 5 from SD-RAM (IC104)
119	DVSS	—	Terminal Ground
120, 121	RD 4, 3	I	Data bus 4, 3 from SD-RAM (IC104)
122	DVDD18	—	Power Supply (+1.8V)
123 to 125	RD 2 to 0	I	Data bus 2 to 0 from SD-RAM (IC104)
126	RD15	I	Data bus 15 from SD-RAM (IC104)
127	DVDD3	—	Power Supply (+3.3V)
128	RD 14	I	Data bus 14 from SD-RAM (IC104)
129 to 133	RD 13 to 9	I	Data bus 13 to 9 from SD-RAM (IC104)
134	DVSS	—	Terminal Ground
135	RD8	I	Data bus 8 from SD-RAM (IC104)
136	GPI0	—	Not Used
137	DQM1	O	DQM1 signal output to SD-RAM (IC104)
138	REW	O	WE signal output to SD-RAM (IC104)
139	CAS	0	CAS signal output to SD-RAM (IC104)
140	RAS	O	RAS signal output to SD-RAM (IC104)
141	DVDD3	—	Power Supply (+3.3V)
142	RCS	O	RCS signal output to SD-RAM (IC206)
143	BAO	0	BAO signal output to SD-RAM (IC206)
144	DVSS	—	Terminal Ground
145	BA1	O	BA1 signal output to SD-RAM (IC104)
146	RA10	O	Address bus 10 output to SD-RAM (IC104)
147	RA0	O	Address bus 0 output to SD-RAM (IC104)
148	DVSS	—	Terminal Ground
149 to 151	RA 1 to 3	O	Address bus 1 to 3 output to SD-RAM (IC104)
152	DVDD18	—	Power Supply (+1.8V)
153	RVREF	I	Reference voltage
154	RCLKB	I	Dram clock
155	DVDD3	—	Power Supply (+3.3V)
156	RCLK	O	CLK signal output to SD-RAM (IC104)
157	CLE	O	CLE signal output to SD-RAM (IC104)
158 to 160	RA 11, 9, 8	O	Address bus 11, 9, 8 output to SD-RAM (IC104)
161	DVSS	—	Terminal Ground
162	RA7	O	Address bus 7 output to SD-RAM (IC104)
163	DVSS	—	Terminal Ground
164 to 166	RA 6 to 4	O	Address bus 6 to 4 output to SD-RAM (IC104)
167	DVDD3	—	Power Supply (+3.3V)
168	DISC/X	—	Not Used
169	RGB	—	Not Used
170	XSMRST	—	Not Used
171	WODE	O	SI signal output to VIDEO AMP (IC201)

Pin No.	Pin Name	I/O	Description
172	NT	—	Not Used
173	DVDD18	—	Power Supply (+1.8V)
174	EUR	—	Not Used
175	DVSS	—	Terminal Ground
176	LIMSW	O	LIMSW signal output to Optical pick-up
177	OCSW	I	SEN signal input from System Controller (IC509)
178	VCLK	—	Not Used
179	CKSW	—	Not Used
180	IO3	—	Not Used
181	TSDM	O	TSDM signal output to Moter driver (IC201)
182	DVDD3	—	Power Supply (+3.3V)
183	MUTE	O	MUTE signal output to Moter driver (IC201)
184	MUTE123	O	MUTE signal output to Moter driver (IC201)
185	REW	—	Not Used
186	FWD	—	Not Used
187	MSW	0	Volume control signal output to Optical pick-up
188	DSEL	O	Select signal output
189	DAVCC	—	Power Supply (+3.3V)
190	VREF	I	Bandgap reference voltage (not used)
191	FS	O	Full scale adjustment (pull down)
192	YUV0	—	Not Used
193	DVSS	—	Terminal Ground
194	YUV1	O	Y signal output to VIDEO AMP (IC201)
195	DAVDD	—	Power Supply (+3.3V)
196	YUV2	O	CHROMA signal output to VIDEO AMP (IC201)
197	DVSS	—	Terminal Ground
198	YUV3	O	VIDEO signal output to VIDEO AMP (IC201)
199	DAVDD	—	Power Supply (+3.3V)
200	YUV4	O	G signal output to VIDEO AMP (IC201)
201	DVSS	—	Terminal Ground
202	YUV5	O	B signal output to VIDEO AMP (IC201)
203	YUV6	O	R signal output to VIDEO AMP (IC201)
204	DVDD3	—	Power Supply (+3.3V)
205	MIC/VSYNC	—	Not Used
206	VOICE/YUV7	—	Not Used
207	KRMOB/HSYNC	—	Not Used
208	SMSCK	—	Not Used
209	SPDATA/SMSDI	I	Audio data of SPDIF input
210	SMSDO	—	Not Used
211	XSMCS	—	Not Used
212	DVDD3	—	Power Supply (+3.3V)
213	ALRCK	I	Audio left/right channel clock
214	ABCK	O	Audio bit clock
215	ACLK	I	Audio DAC master clock
216	DVSS	—	Terminal Ground
217	ASDATA0	O	Auio serial data
218	ASDATA1	O	Auio serial data

Pin No.	Pin Name	I/O	Description
219	ASDATA2	O	Auio serial data
220	XRST	—	Not Used
221	DVDD18	—	Power Supply (+1.8V)
222	ASDATA4	O	Auio serial data (not used)
223	DVSS	—	Terminal Ground
224	DWIDE	—	Not Used
225	SDPIF	—	SPDIF output (not used)
226	RFGND18	—	Terminal Ground
227	RFVDD18	—	Power Supply (+1.8V)
228	ZTALO	O	Oscillator output signal
229	ZTALI	I	Oscillator input signal
230	JITFO	O	RF jitter meter output
231	JITFN	I	Negative input of operation amplifier for RF jigger meter
232	PLLVSS	—	Terminal Ground
233	IDAC	—	Not Used
234	PLLVDD3	—	Power Supply (+3.3V)
235	LPFON	O	Negative output of loop filter amplifier
236	LPFIP	I	Positive input of loop filter amplifier
237	LPFIN	I	Negative input of loop filter amplifier
238	LPFOP	O	Positive output of loop filter amplifier
239	VDD3	I	Power Supply (+3.3V)
240	VCM	I	SACD-Common mode Reference
241	VSS	—	Terminal Ground
242	VREEP	I	SACD-TOP Reference
243	VREEN	I	SACD-Bottom Reference
244	RFVDD3	—	Power Supply (+3.3V)
245	RFRPDC	I	RFRP signal input
246	RFRPAC	I	RFRP signal input
247	HRFZC	I	High frequency RF ripple zero crossing
248	CRTPLP	O	Defect level filter capacitor connecting
249	RFGND	—	Terminal Ground
250	CEQP	O	EQ offset loop capacitance (not used)
251	CEQN	O	EQ offset loop capacitance (not used)
252	OSP	O	RF offset cancellation capacitor connecting
253	OSN	I	RF offset cancellation capacitor connecting
254	RFGC	O	RF offset loop capacitor connecting for DVD-ROM
255	IREF	I	Current reference input
256	AVDD3	—	Power Supply (+3.3V)

SECTION 7
EXPLODED VIEWS

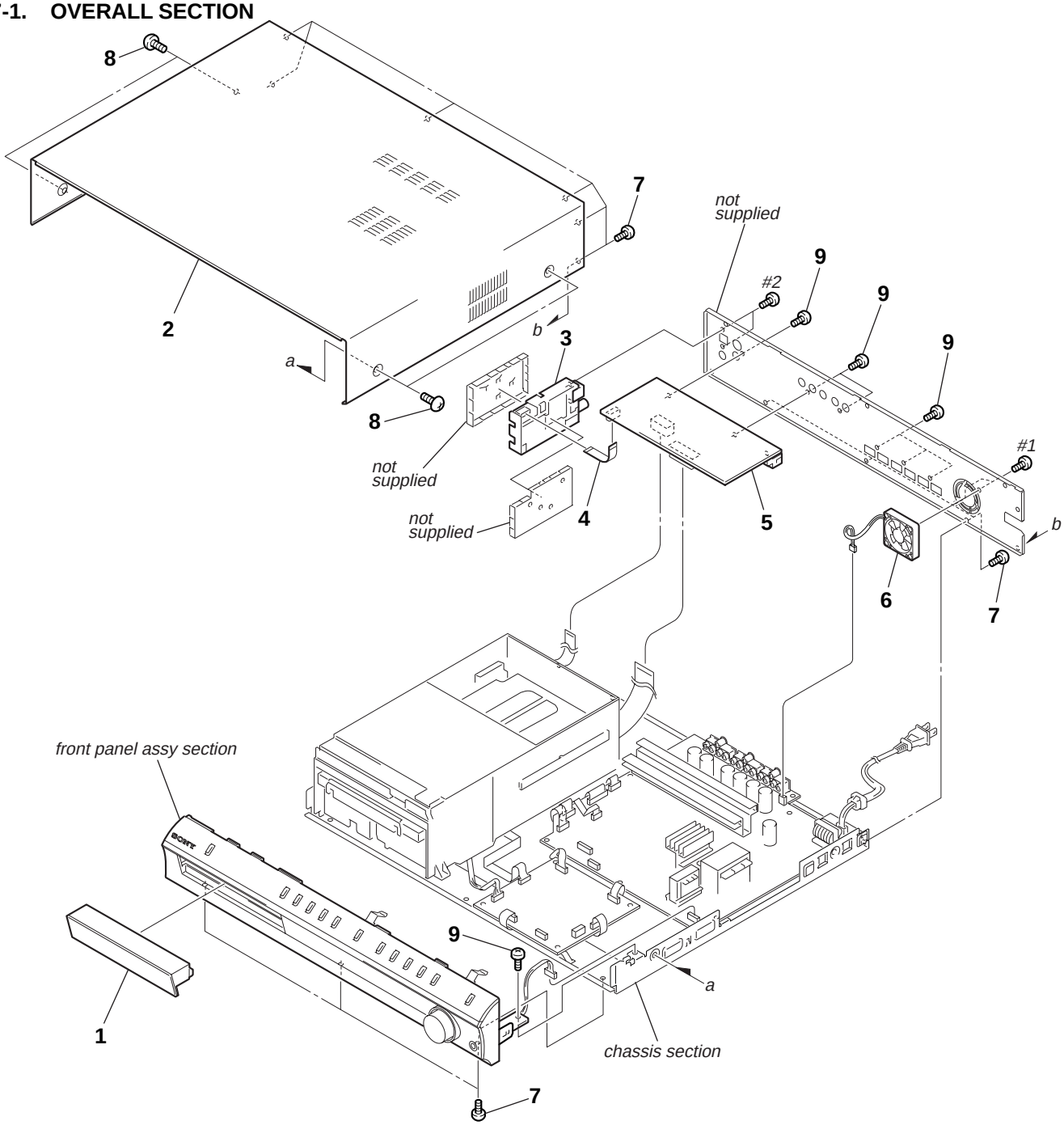
NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Abbreviation
  AUS : Australian model.
  CND : Canadian model.
  E32 : 110-240 V AC Area in E model.
  EA : Saudi Arabia model.
  MX : Mexican model.
  SP : Singapore model.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

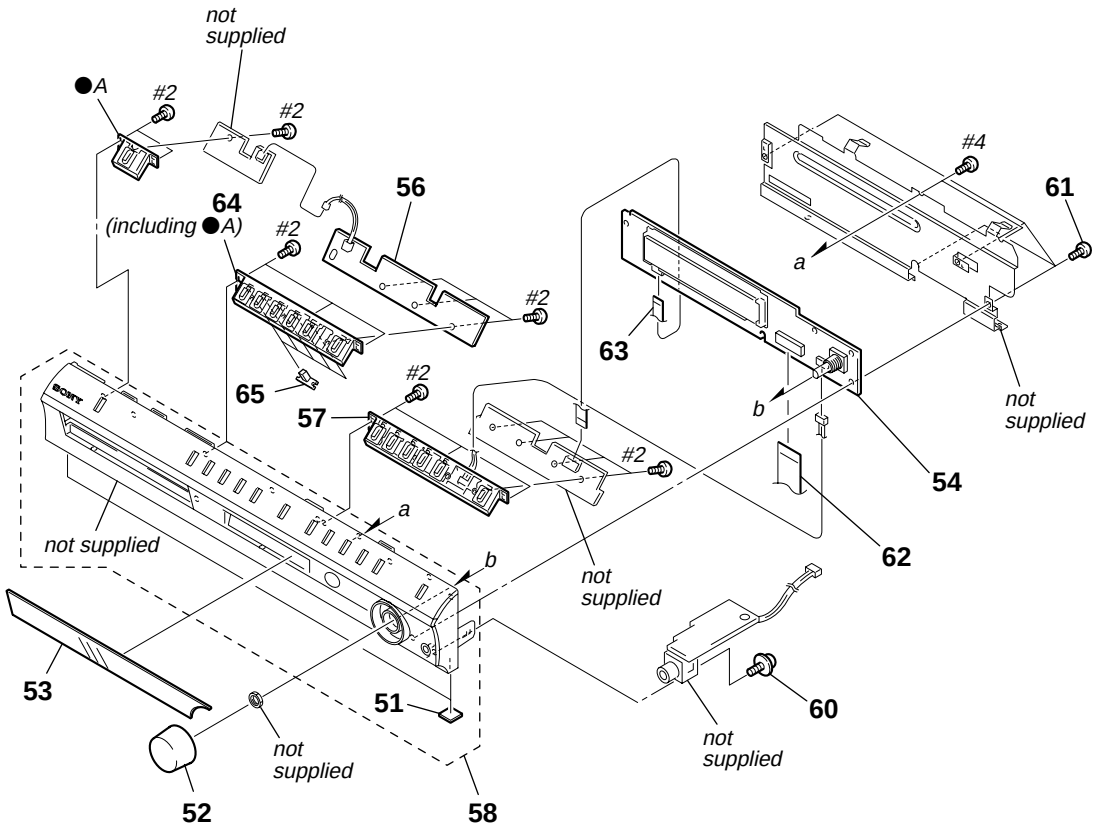
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. OVERALL SECTION



Ref. No.	Part No.	Description	Remark
1	X-2025-212-1	DVD LID ASSY	
2	2-515-796-01	CASE	
3	A-1074-640-A	TUNER UNIT (DTP-005)(UC)(US, CND)	
3	A-1074-641-A	TUNER UNIT (DTP-005)(SP) (EXCEPT US,CND)	
4	1-828-962-11	WIRE (FLAT TYPE) (11 CORE)	
5	A-1088-069-A	IO BOARD, COMPLETE	
6	1-787-331-11	FAN, D.C.	
7	3-077-331-01	+BV3 (3-CR)	
8	3-363-099-51	SCREW (CASE 3 TP2)	
9	3-077-331-21	+BV3 (3-CR)	
#1	7-685-881-09	SCREW +BVTT 4X8 (S)	
#2	7-685-862-04	SCREW (+BV2.6)	

7-2. FRONT PANEL SECTION

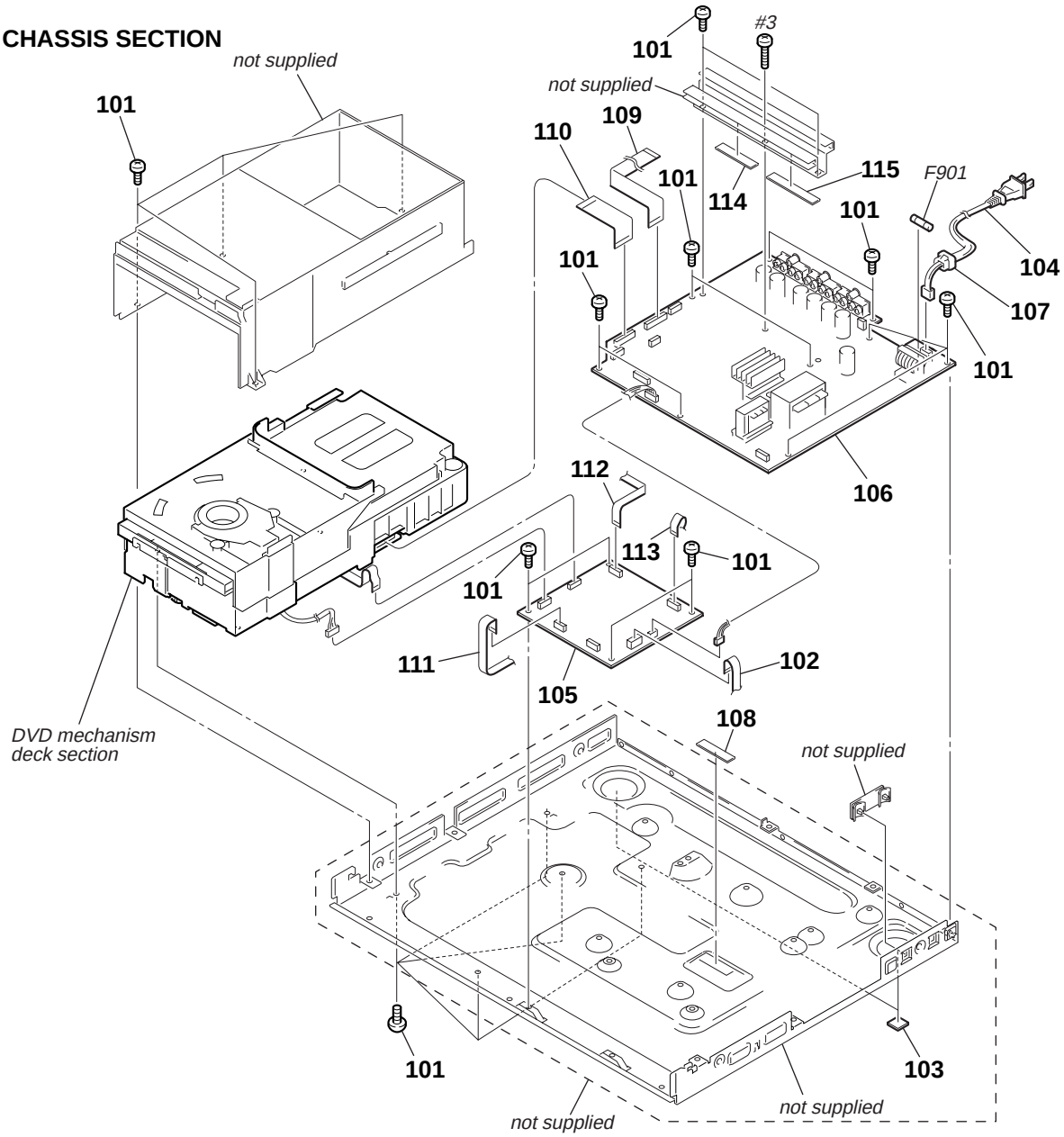


Ref. No.	Part No.	Description	Remark
51	4-244-969-01	FOOT	
52	2-541-506-01	KNOB (VOL)(DX150)	
52	2-541-506-11	KNOB (VOL)(DX170/DX250)	
53	2-515-794-01	WINDOW (FL)	
54	A-1088-090-A	FL BOARD, COMPLETE	
56	A-1088-093-A	LED BOARD, COMPLETE	
57	2-515-795-01	BUTTON (PLAY)	
58	X-2025-209-1	FRONT PANEL ASSY (DX150:US,CND)	
58	X-2050-702-1	FRONT PANEL ASSY (MX, E32)	
58	X-2050-704-1	FRONT PANEL ASSY (EA, SP, AUS)	

Ref. No.	Part No.	Description	Remark
58	X-2050-726-1	FRONT PANEL ASSY (DX170)	
58	X-2050-807-1	FRONT PANEL ASSY (DX250)	
60	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
61	3-077-331-01	+BV3 (3-CR)	
62	1-828-363-11	WIRE (FLAT TYPE) (19 CORE)	
63	1-828-957-11	WIRE (FLAT TYPE) (9 CORE)	
64	2-630-339-01	BUTTON (DISC)	
65	2-515-793-01	INDICATOR	
#2	7-685-862-04	SCREW (+BV2.6)	
#4	7-685-133-11	SCREW (+P2.6X6)	

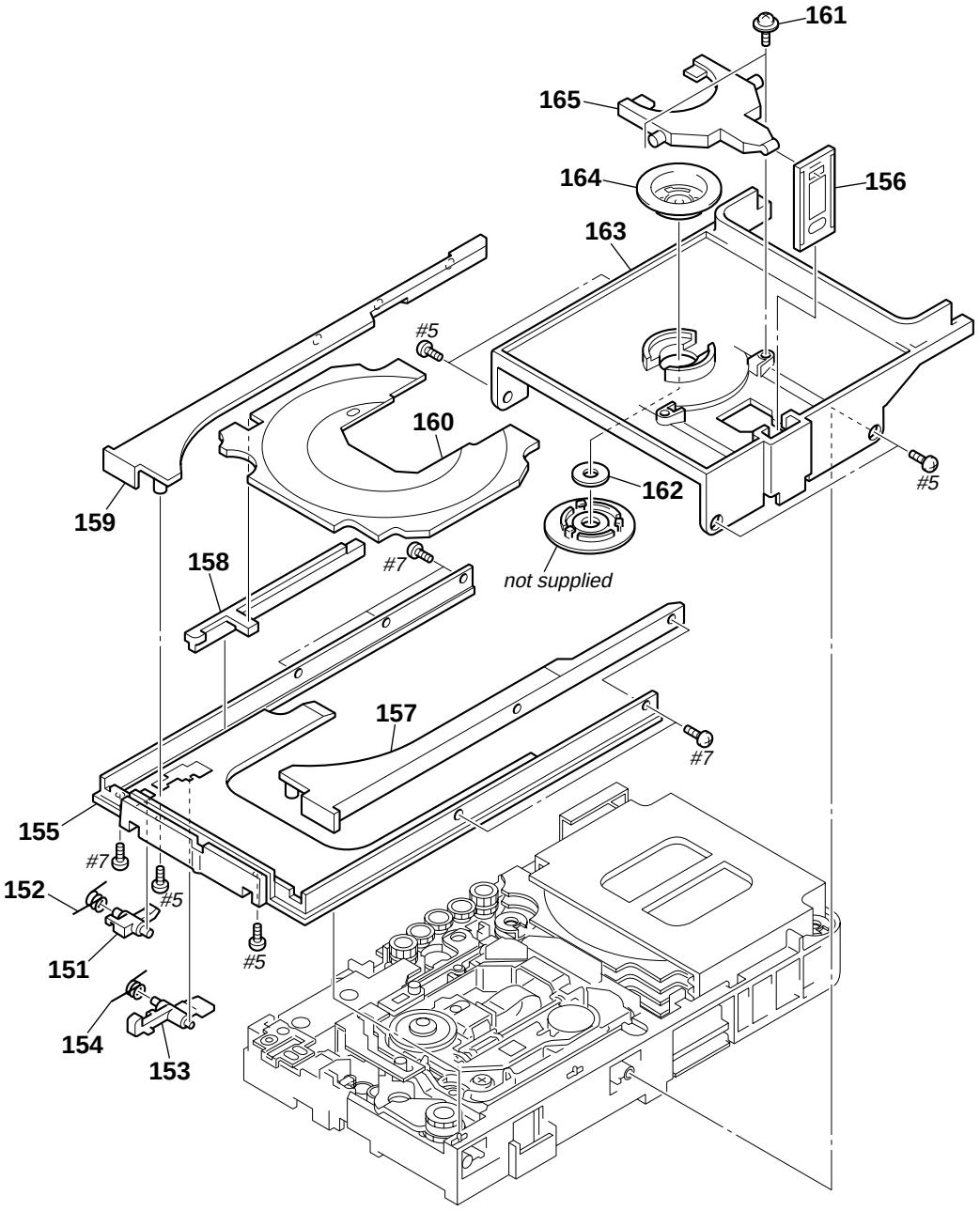
☆ New part of EEP ROM (IC103) on the DMB10 board or DMB11 board cannot be used. Therefore, if the mounted DMB10 board (A-1088-070-A, etc.) is replaced, exchange new EEP ROM (IC103) with that used before the replacement.

7-3. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
101	3-077-331-01	+BV3 (3-CR)	
102	1-829-927-11	WIRE (FLAT TYPE) (11CORE)	
103	4-244-969-01	FOOT	
⚠104	1-696-847-22	CORD, POWER (AUS)	
⚠104	1-783-531-91	CORD, POWER (US,CND)	
⚠104	1-824-090-11	CORD, POWER (MX)	
⚠104	1-828-528-11	CORD, POWER (E32, EA, SP)	
☆ 105	A-1088-070-A	DMB10 BOARD, COMPLETE (DX150 :US, CND, MX, E32)	
☆ 105	A-1104-418-A	DMB10 BOARD, COMPLETE (EA, AUS)	
☆ 105	A-1104-559-A	DMB10 BOARD, COMPLETE (DX170)	
☆ 105	A-1105-154-A	DMB10 BOARD, COMPLETE (DX250)	
☆ 105	A-1110-779-A	DMB10 BOARD, COMPLETE (SP)	
☆ 105	A-1121-332-A	DMB11 BOARD, COMPLETE (DX150 :US, CND, MX, E32)	
☆ 105	A-1121-461-A	DMB11 BOARD, COMPLETE (DX170)	
☆ 105	A-1121-479-A	DMB11 BOARD, COMPLETE (DX250)	
☆ 105	A-1123-578-A	DMB11 BOARD, COMPLETE (EA, AUS)	
☆ 105	A-1124-250-A	DMB11 BOARD, COMPLETE (SP)	
106	A-1088-066-A	MAIN BOARD, COMPLETE (DX150: US, CND)	
106	A-1104-401-A	MAIN BOARD, COMPLETE (MX)	
106	A-1104-416-A	MAIN BOARD, COMPLETE (AUS)	
106	A-1104-552-A	MAIN BOARD, COMPLETE (DX170)	
106	A-1105-147-A	MAIN BOARD, COMPLETE (DX250)	
106	A-1110-722-A	MAIN BOARD, COMPLETE (EA)	
106	A-1110-742-A	MAIN BOARD, COMPLETE (E32)	
106	A-1110-778-A	MAIN BOARD, COMPLETE (SP)	
107	4-217-350-11	STOPPER, CORD	
108	4-254-954-01	SHEET (DMB), RADIATION	
109	1-828-382-11	WIRE (FLAT TYPE) (23 CORE)	
110	1-828-369-11	WIRE (FLAT TYPE) (21 CORE)	
111	1-828-323-11	WIRE (FLAT TYPE) (11 CORE)	
112	1-830-463-11	WIER (FLAT TYPE) (13 CORE)	
113	1-830-459-11	WIRE (FLAT TYPE) (7 CORE)	
114	2-597-972-01	SHEET, RADIATION (DX170/DX250)	
114	2-597-972-21	SHEET, RADIATION (DX150)	
115	2-597-972-11	SHEET, RADIATION	
⚠F901	1-532-506-32	FUSE (6.3A/250V) (E32, EA, SP, AUS)	
⚠F901	1-576-537-12	FUSE, GLASS TUBE (DIA.5) (8A/125V) (US,CND,MX)	
#3	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	

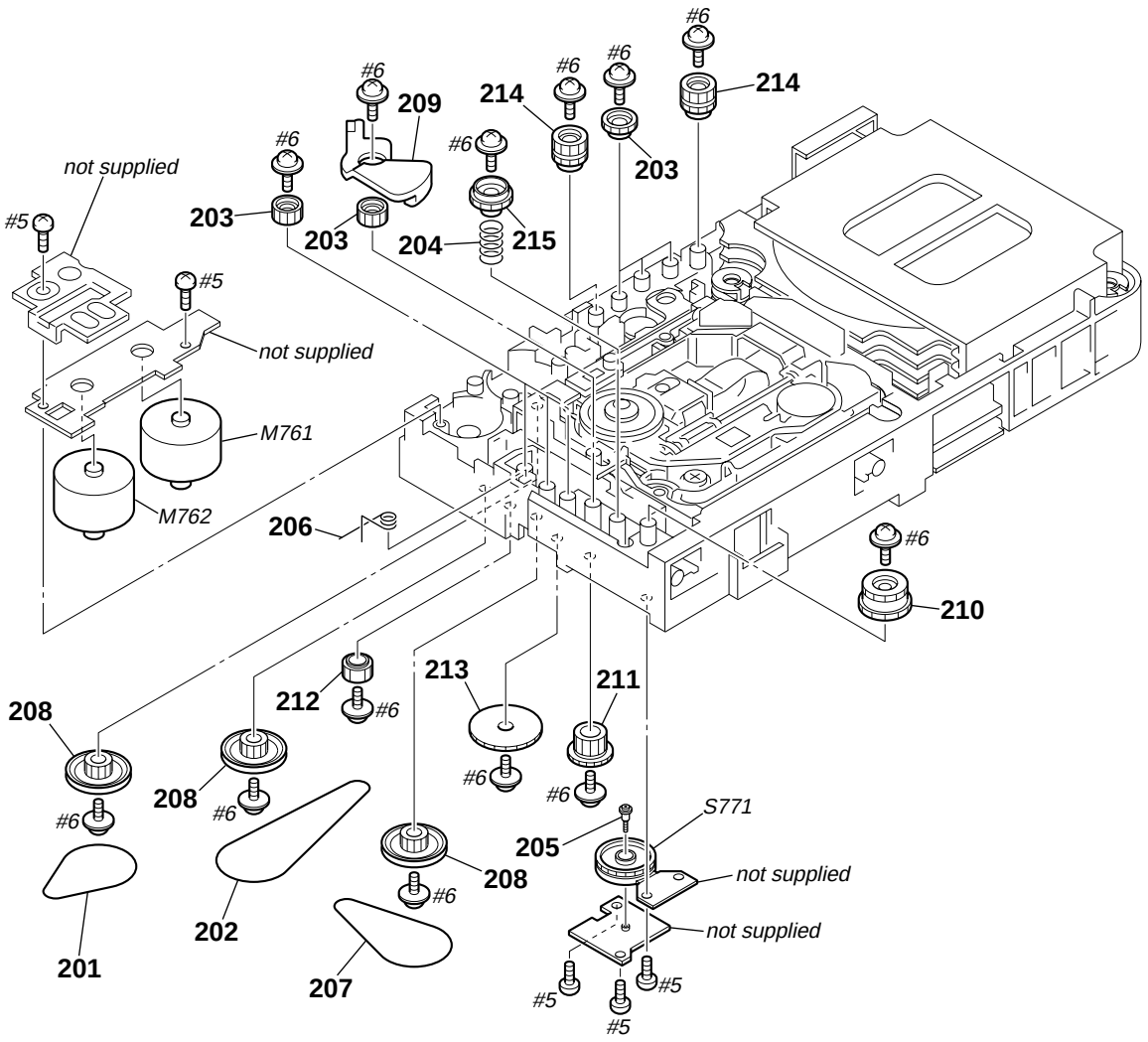
7-4. DVD MECHANISM DECK SECTION-1 (CDM81C-DVBU101)



Ref. No.	Part No.	Description	Remark
151	4-251-849-01	LEVER (SW2)	
152	4-251-991-01	SPRING (SW2), TORSION	
153	4-251-860-01	LEVER (LOCK)	
154	4-251-867-01	SPRING (LOCK), TORSION	
155	4-251-828-01	TRAY (MAIN)	
156	4-251-822-01	JOINT (LIFTER)	
157	4-251-857-01	COVER (R)	
158	4-251-830-01	SLIDER (ST)	
159	4-251-858-01	COVER (L)	

Ref. No.	Part No.	Description	Remark
160	4-251-829-02	TRAY (SUB)	
161	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
162	4-251-923-01	YOKE (310)	
163	4-251-821-02	BRACKET (TOP)	
164	4-251-922-01	PULLEY B (310), CHUCKING	
165	4-251-824-01	LIFTER	
#5	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#7	7-685-102-19	SCREW +P 2X4 NON-SLIT TYPE 2	

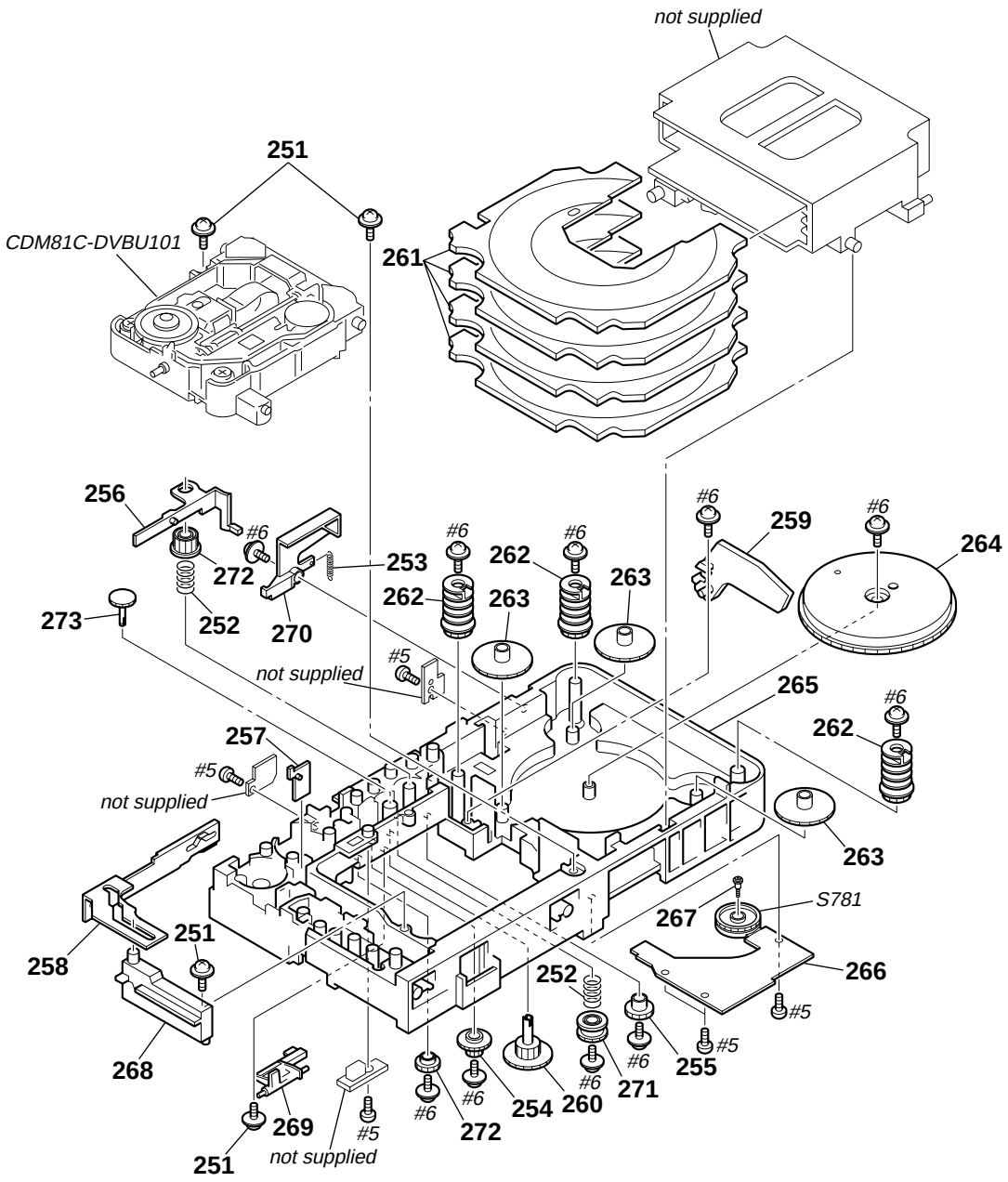
7-5. DVD MECHANISM DECK SECTION-2 (CDM81C-DVBU101)



Ref. No.	Part No.	Description	Remark
201	4-251-870-01	BELT (BU)	
202	4-251-869-01	BELT (MAIN TRAY)	
203	4-251-841-01	GEAR (SUB TRAY 1)	
204	4-251-873-01	SPRING (MODE), COMPRESSION	
205	4-239-618-02	SCREW (+PWH, 2X6), STEP TAPPING	
206	4-251-872-01	SPRING (LEVER), TORSION	
207	4-251-868-01	BELT (SUB TRAY)	
208	4-251-853-01	PULLEY (BU)	
209	4-251-834-01	LEVER (MAIN TRAY)	
210	4-251-852-01	GEAR (MAIN TRAY 3)	

Ref. No.	Part No.	Description	Remark
211	4-251-854-01	GEAR (BU1)	
212	4-251-850-01	GEAR (MAIN TRAY 1)	
213	4-251-856-01	GEAR (BU2)	
214	4-251-842-01	GEAR (SUB TRAY 2)	
215	4-251-851-01	GEAR (MAIN TRAY 2)	
M761	A-4713-174-A	MOTOR (81) ASSY (LD/ST MOTOR)	
M762	A-4713-174-A	MOTOR (81) ASSY (BU U/D MOTOR)	
S771	1-478-552-11	ENCODER, ROTARY (MD)	
#5	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#6	7-685-902-21	SCREW +PTPWH 2.6X8 (TYPE2)	

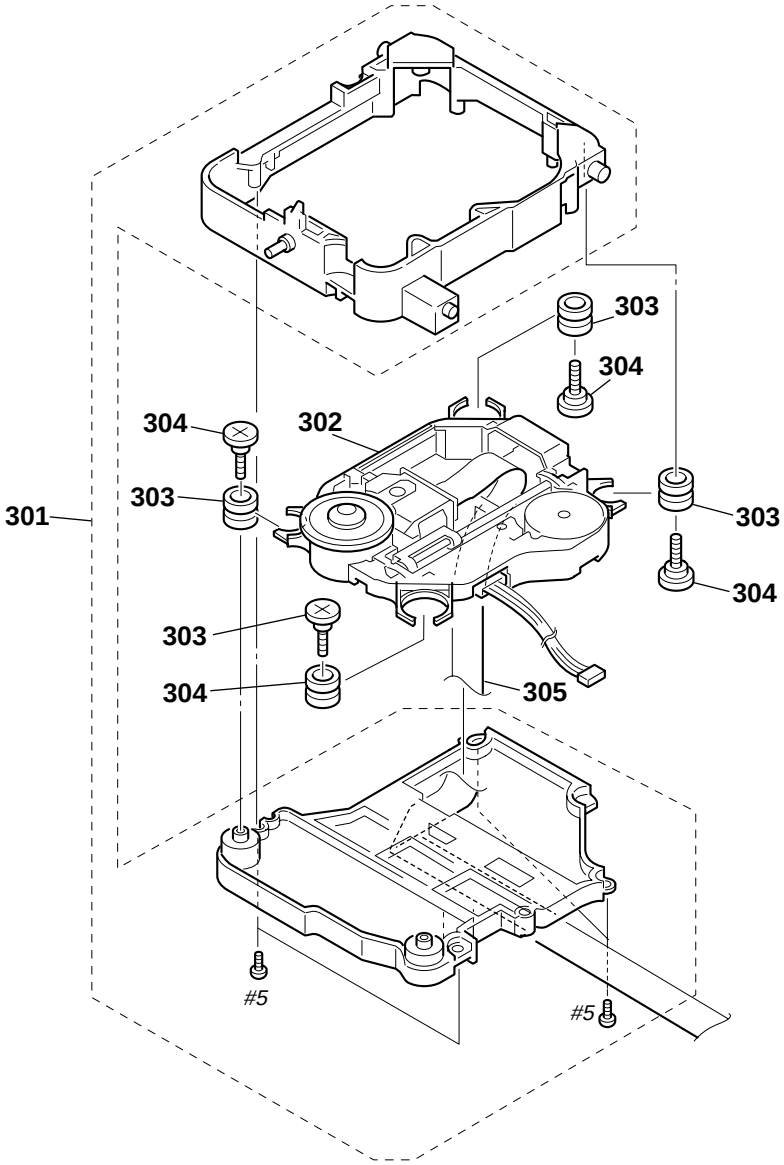
7-6. DVD MECHANISM DECK SECTION-3 (CDM81C-DVBU101)



Ref. No.	Part No.	Description	Remark
251	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
252	4-251-873-01	SPRING (MODE), COMPRESSION	
253	4-251-874-02	SPRING (SW), TENSION	
254	4-251-844-01	GEAR (SS2)	
255	4-251-835-01	GEAR (STOCKER 1)	
256	4-251-833-01	LEVER (SUB TRAY)	
257	4-251-843-01	LEVER (RELEASE)	
258	4-251-831-02	LEVER (MODE)	
259	4-251-862-01	SHUTTER (TRAY)	
260	4-251-845-01	GEAR (SS3)	
261	4-251-829-02	TRAY (SUB)	
262	4-251-827-01	CAM (STOCKER)	
263	4-251-836-01	GEAR (STOCKER 2)	

Ref. No.	Part No.	Description	Remark
264	4-251-838-01	GEAR (STOCKER 3)	
265	4-251-823-01	CHASSIS (CDM81)	
266	A-4750-232-A	TRANSLATION BOARD, COMPLETE	
267	4-239-618-02	SCREW (+PWH, 2X6), STEP TAPPING	
268	4-251-825-01	CAM (BU)	
269	4-251-832-01	LEVER (STOCKER)	
270	4-251-861-01	LEVER (SW)	
271	4-251-839-01	GEAR (STOCKER 4)	
272	4-251-840-01	GEAR (SUB TRAY)	
273	4-251-847-01	GEAR (SS4)	
S781	1-478-551-11	ENCODER, ROTARY (ST U/D ENCODER)	
#5	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#6	7-685-902-21	SCREW +PTPWH 2.6X8 (TYPE2)	

7-7 BASE UNIT (DVBU101)



Ref. No.	Part No.	Description	Remark
301	X-4956-097-1	HOLDER (310) ASSY	
⚠302	8-820-291-02	OPTICAL PICK-UP (KHM-310CAB/C2RP)	
303	3-088-372-01	INSULATOR	
304	3-087-599-01	INSULATOR SCREW	
305	1-830-551-11	WIRE (FLAT TYPE) (24 CORE)	
#5	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SECTION 8
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. ., uPA. . : µPA. .,
  uPB. . : µPB. ., uPC. . : µPC. .,
  uPD. . : µPD. .
- Abbreviation
  AUS : Australian model.
  CND: Canadian model.
  E32 : 110-240 V AC Area in E model.
  EA : Saudi Arabia model.
  MX : Mexican model.
  SP : Singapore model.

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
☆	A-1088-070-A	DMB10 BOARD, COMPLETE (DX150 :US, CND, MX, E32)			
☆	A-1104-418-A	DMB10 BOARD, COMPLETE (EA, AUS)			
☆	A-1104-559-A	DMB10 BOARD, COMPLETE (DX170)			
☆	A-1105-154-A	DMB10 BOARD, COMPLETE (DX250)			
☆	A-1110-779-A	DMB10 BOARD, COMPLETE (SP)			
☆	A-1121-332-A	DMB11 BOARD, COMPLETE (DX150 :US, CND, MX, E32)			
☆	A-1121-461-A	DMB11 BOARD, COMPLETE (DX170)			
☆	A-1121-479-A	DMB11 BOARD, COMPLETE (DX250)			
☆	A-1123-578-A	DMB11 BOARD, COMPLETE (EA, AUS)			
☆	A-1124-250-A	DMB11 BOARD, COMPLETE (SP)			
		**********			
		< CAPACITOR >			
C101	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C102	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V (DMB10)
C102	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V (DMB11)
C105	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C106	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C108	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C109	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C112	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C113	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C114	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C115	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C116	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C117	1-124-779-00	ELECT CHIP	10uF	20%	16V
C118	1-124-779-00	ELECT CHIP	10uF	20%	16V
C119	1-124-779-00	ELECT CHIP	10uF	20%	16V
C120	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C121	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C122	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C123	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C124	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C125	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C126	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C127	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C128	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C129	1-124-779-00	ELECT CHIP	10uF	20%	16V
C130	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C131	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C132	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C133	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C135	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C136	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C137	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C138	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C139	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C140	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C141	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (DMB10)
C142	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (DMB10)
C143	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (DMB10)
C144	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C145	1-165-908-11	CERAMIC CHIP	1uF	10%	10V (DMB10)
C146	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C147	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C148	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C149	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C150	1-124-779-00	ELECT CHIP	10uF	20%	16V
C151	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C152	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C153	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C154	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C155	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C156	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C158	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C159	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C160	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C161	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C162	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C163	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C164	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C167	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C170	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C171	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C172	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C173	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C174	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C175	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C176	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C177	1-126-205-11	ELECT CHIP	47uF	20%	6.3V

☆ New part of EEP ROM (IC103) on the DMB10 board or DMB11 board cannot be used. Therefore, if the mounted DMB10 board (A-1088-070-A, etc.) is replaced, exchange new EEP ROM (IC103) with that used before the replacement.

Ref. No.	Part No.	Description			Remark
C178	1-126-208-21	ELECT CHIP	47uF	20%	4V
C179	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C180	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C181	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C182	1-127-715-91	CERAMIC CHIP	0.22uF	10%	16V
C184	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C187	1-126-208-21	ELECT CHIP	47uF	20%	4V
C188	1-127-715-91	CERAMIC CHIP	0.22uF	10%	16V
C189	1-128-934-91	CERAMIC CHIP	0.33uF	20%	10V
C190	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C191	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C192	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C193	1-127-715-91	CERAMIC CHIP	0.22uF	10%	16V
C195	1-127-715-91	CERAMIC CHIP	0.22uF	10%	16V
C196	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C203	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C205	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C206	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C208	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C209	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C210	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C211	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C212	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C213	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C214	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C215	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C217	1-126-204-11	ELECT CHIP	47uF	20%	16V
C218	1-124-779-00	ELECT CHIP	10uF	20%	16V
C219	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C220	1-124-779-00	ELECT CHIP	10uF	20%	16V
C221	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C222	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C224	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C233	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C402	1-126-204-11	ELECT CHIP	47uF	20%	16V
C403	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C3601	1-117-370-11	CERAMIC CHIP	10uF		10V
C3602	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3603	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3605	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C3606	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3607	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3608	1-124-779-00	ELECT CHIP	10uF	20%	16V
C3609	1-124-779-00	ELECT CHIP	10uF	20%	16V
C3610	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3611	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C3621	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C4501	1-117-370-11	CERAMIC CHIP	10uF		10V
C4502	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C4504	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< CONNECTOR >			
CN101	1-815-763-11	CONNECTOR, FFC/FPC 24P			
* CN105	1-770-470-21	PIN, CONNECTOR (PC BOARD) 6P			
CN106	1-784-370-21	CONNECTOR, FFC/FPC 11P			
* CN201	1-770-470-21	PIN, CONNECTOR (PC BOARD) 6P			
CN301	1-793-989-21	FFC/CONNECTOR, FPC (LIF (NON-ZIF)) 13P			

Ref. No.	Part No.	Description	Remark
CN302	1-784-366-21	CONNECTOR, FFC/FPC 7P	
CN401	1-779-993-11	PIN, CONNECTOR (PWB) 5P	
CN4501	1-784-370-21	CONNECTOR, FFC/FPC 11P	
		< DIODE >	
D1001	8-719-058-24	DIODE RB501V-40TE-17	
D3501	8-719-988-61	DIODE 1SS355TE-17	
D3502	8-719-988-61	DIODE 1SS355TE-17	
D3601	8-719-988-61	DIODE 1SS355TE-17	
D3602	8-719-988-61	DIODE 1SS355TE-17	
		< FERRITE BEAD >	
FB111	1-414-226-21	INDUCTOR, FERRITE BEAD	
FB112	1-414-226-21	INDUCTOR, FERRITE BEAD	
FB113	1-414-226-21	INDUCTOR, FERRITE BEAD	
FB114	1-414-226-21	INDUCTOR, FERRITE BEAD	
FB115	1-414-226-21	INDUCTOR, FERRITE BEAD	
FB401	1-469-324-21	FERRITE, EMI (SMD) (2012)	
FB402	1-469-324-21	FERRITE, EMI (SMD) (2012)	
FB403	1-469-324-21	FERRITE, EMI (SMD) (2012)	
FB404	1-469-324-21	FERRITE, EMI (SMD) (2012)	
FB405	1-469-324-21	FERRITE, EMI (SMD) (2012)	
FB406	1-469-324-21	FERRITE, EMI (SMD) (2012)	
		< FLUORESCENT INDICATOR >	
FL101	1-234-494-21	FILTER, EMI REMOVAL (SMD)	
FL104	1-234-494-21	FILTER, EMI REMOVAL (SMD)	
FL105	1-234-494-21	FILTER, EMI REMOVAL (SMD)	
FL106	1-234-494-21	FILTER, EMI REMOVAL (SMD)	
FL107	1-234-494-21	FILTER, EMI REMOVAL (SMD)	
FL108	1-234-494-21	FILTER, EMI REMOVAL (SMD)	
FL401	1-234-494-21	FILTER, EMI REMOVAL (SMD)	
FL402	1-233-893-21	FILTER, CHIP EMI	
FL403	1-234-494-21	FILTER, EMI REMOVAL (SMD)	
FL4501	1-234-494-21	FILTER, EMI REMOVAL (SMD)	
		< IC >	
IC101	6-805-276-01	IC MBM29DL32TF70-CBA1-0501UC	(DMB10: EXCEPT EA, SP, AUS)
IC101	6-805-277-01	IC MBM29DL32TF70-CBA1-0501CE	(DMB10: EA, AUS)
IC101	6-805-278-01	IC MBM29DL32TF70-CBA1-0501GA	(DMB10: SP)
IC101	6-805-718-01	IC S29JL032H70-CBA1-0503CE	(DMB11: EA, AUS)
IC101	6-805-719-01	IC S29JL032H70-CBA1-0503GA (DMB11: SP)	
IC101	6-805-784-01	IC S29JL032H70-CBA1-0503UC	(DMB11: EXCEPT EA, SP, AUS)
IC102	6-706-727-01	IC CXD9804R (DMB10)	
IC102	6-707-535-01	IC CXD9849R (DMB11)	
☆ IC103	(not supplied)	IC BR24L64F-WE2	
IC104	6-706-390-11	IC HY57V641620HGTP-HDR	
IC105	6-702-302-01	IC TK11133CSCL-G	
IC106	8-759-667-18	IC PQ018EZ01ZP (DMB10)	
IC106	6-708-153-01	IC PQ018EN01ZPH (DMB11)	
IC107	6-702-302-01	IC TK11133CSCL-G	
IC201	6-704-524-01	IC FAN8036L	
IC3601	6-707-608-01	IC PCM1803DBR	

☆ New part of EEP ROM (IC103) on the DMB10 board or DMB11 board cannot be used. Therefore, if the mounted DMB10 board (A-1088-070-A, etc.) is replaced, exchange new EEP ROM (IC103) with that used before the replacement.

Ref. No.	Part No.	Description			Remark
IC4501	8-759-573-97	IC SN74LVC541APWR			
IC4502	6-703-589-01	IC SN74LVC1G125DCKR			
		< COIL >			
L3601	1-469-555-21	INDUCTOR	10uH		
L3602	1-469-555-21	INDUCTOR	10uH		
		< TRANSISTOR >			
Q101	6-550-554-01	TRANSISTOR	UM6K1NL02TN (DMB10)		
Q101	6-550-008-01	TRANSISTOR	UM6K1N-TN (DMB11)		
Q102	6-550-653-01	TRANSISTOR	QST8TR		
Q103	8-729-027-52	TRANSISTOR	DTC124EKA-T146		
		< RESISTOR >			
R101	1-216-809-11	METAL CHIP	100	5%	1/10W
R104	1-216-864-11	SHORT CHIP	0		
R105	1-216-833-11	METAL CHIP	10K	5%	1/10W
R106	1-216-833-11	METAL CHIP	10K	5%	1/10W
R107	1-216-833-11	METAL CHIP	10K	5%	1/10W
R108	1-216-857-11	METAL CHIP	1M	5%	1/10W
R109	1-216-864-11	SHORT CHIP	0		
R110	1-216-841-11	METAL CHIP	47K	5%	1/10W
R111	1-216-809-11	METAL CHIP	100	5%	1/10W
R112	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R113	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R114	1-216-845-11	METAL CHIP	100K	5%	1/10W
R115	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R116	1-216-821-11	METAL CHIP	1K	5%	1/10W
R117	1-216-841-11	METAL CHIP	47K	5%	1/10W
R118	1-216-801-11	METAL CHIP	22	5%	1/10W
R120	1-216-801-11	METAL CHIP	22	5%	1/10W
R121	1-216-801-11	METAL CHIP	22	5%	1/10W
R123	1-216-864-11	SHORT CHIP	0		
R124	1-216-841-11	METAL CHIP	47K	5%	1/10W
R126	1-216-864-11	SHORT CHIP	0		
R127	1-216-809-11	METAL CHIP	100	5%	1/10W
R133	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (DMB10)
R134	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (DMB10)
R135	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (DMB10)
R136	1-216-835-11	METAL CHIP	15K	5%	1/10W
R138	1-216-845-11	METAL CHIP	100K	5%	1/10W
R141	1-218-916-11	METAL CHIP	750K	0.5%	1/10W
R142	1-216-845-11	METAL CHIP	100K	5%	1/10W
R143	1-216-809-11	METAL CHIP	100	5%	1/10W
R144	1-216-864-11	SHORT CHIP	0		
R146	1-216-805-11	METAL CHIP	47	5%	1/10W
R151	1-216-805-11	METAL CHIP	47	5%	1/10W
R152	1-216-864-11	SHORT CHIP	0		
R153	1-216-805-11	METAL CHIP	47	5%	1/10W
R155	1-216-805-11	METAL CHIP	47	5%	1/10W
R160	1-216-805-11	METAL CHIP	47	5%	1/10W
R161	1-216-809-11	METAL CHIP	100	5%	1/10W
R164	1-216-809-11	METAL CHIP	100	5%	1/10W
R169	1-216-833-11	METAL CHIP	10K	5%	1/10W
R187	1-216-864-11	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
R189	1-218-827-11	METAL CHIP	150	0.5%	1/10W
R190	1-218-827-11	METAL CHIP	150	0.5%	1/10W
R191	1-216-821-11	METAL CHIP	1K	5%	1/10W
R192	1-218-827-11	METAL CHIP	150	0.5%	1/10W
R193	1-216-821-11	METAL CHIP	1K	5%	1/10W
R195	1-218-827-11	METAL CHIP	150	0.5%	1/10W
R196	1-216-864-11	SHORT CHIP	0		
R197	1-218-827-11	METAL CHIP	150	0.5%	1/10W
R204	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R205	1-216-833-11	METAL CHIP	10K	5%	1/10W
R206	1-216-833-11	METAL CHIP	10K	5%	1/10W
R207	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R208	1-216-839-11	METAL CHIP	33K	5%	1/10W
R209	1-216-839-11	METAL CHIP	33K	5%	1/10W
R210	1-216-841-11	METAL CHIP	47K	5%	1/10W
R212	1-216-833-11	METAL CHIP	10K	5%	1/10W
R213	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R214	1-216-835-11	METAL CHIP	15K	5%	1/10W
R215	1-216-834-11	METAL CHIP	12K	5%	1/10W
R216	1-216-834-11	METAL CHIP	12K	5%	1/10W
R219	1-216-838-11	METAL CHIP	27K	5%	1/10W
R220	1-216-833-11	METAL CHIP	10K	5%	1/10W
R221	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R223	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R224	1-216-833-11	METAL CHIP	10K	5%	1/10W
R225	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R226	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R230	1-218-893-11	METAL CHIP	82K	0.5%	1/10W
R231	1-218-875-11	METAL CHIP	15K	0.5%	1/10W
R232	1-218-877-11	METAL CHIP	18K	0.5%	1/10W
R233	1-218-883-11	METAL CHIP	33K	0.5%	1/10W
R234	1-216-833-11	METAL CHIP	10K	5%	1/10W
R246	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R247	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1101	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R1102	1-218-827-11	METAL CHIP	150	0.5%	1/10W
R1103	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1104	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1105	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1107	1-216-864-11	SHORT CHIP	0 (DMB10)		
R1108	1-216-833-11	METAL CHIP	10K	5%	1/10W (DMB10)
R1108	1-216-864-11	SHORT CHIP	0 (DMB11)		
R1109	1-216-864-11	SHORT CHIP	0		
R1110	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R1120	1-500-284-21	INDUCTOR, FERRITE BEAD			
R1121	1-500-284-21	INDUCTOR, FERRITE BEAD			
R1122	1-500-284-21	INDUCTOR, FERRITE BEAD			
R1123	1-500-284-21	INDUCTOR, FERRITE BEAD			
R1124	1-500-284-21	INDUCTOR, FERRITE BEAD			
R1125	1-500-284-21	INDUCTOR, FERRITE BEAD			
R1129	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1133	1-216-864-11	SHORT CHIP	0		
R1134	1-216-864-11	SHORT CHIP	0		
R1150	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R1151	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R1152	1-216-827-11	METAL CHIP	3.3K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R1168	1-216-817-11	METAL CHIP	470	5%	1/10W
R1502	1-216-864-11	SHORT CHIP	0		
R1504	1-216-864-11	SHORT CHIP	0 (DMB10)		
R1504	1-400-244-11	BEAD, FERRITE (CHIP) (1608) (DMB11)			
R1527	1-216-864-11	SHORT CHIP	0		
R1530	1-216-864-11	SHORT CHIP	0		
R1531	1-216-864-11	SHORT CHIP	0		
R1540	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1542	1-216-864-11	SHORT CHIP	0		
R1543	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1544	1-216-864-11	SHORT CHIP	0		
R1546	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R1547	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1548	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1549	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1550	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1551	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1553	1-216-864-11	SHORT CHIP	0		
R1554	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1557	1-216-809-11	METAL CHIP	100	5%	1/10W
R2504	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R3601	1-216-809-11	METAL CHIP	100	5%	1/10W
R3602	1-216-809-11	METAL CHIP	100	5%	1/10W
R3603	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3605	1-216-864-11	SHORT CHIP	0		
R3606	1-216-864-11	SHORT CHIP	0		
R3607	1-216-864-11	SHORT CHIP	0		
R3609	1-216-864-11	SHORT CHIP	0		
R3611	1-216-809-11	METAL CHIP	100	5%	1/10W
R3621	1-216-809-11	METAL CHIP	100	5%	1/10W
R4501	1-216-864-11	SHORT CHIP	0		
R4502	1-216-864-11	SHORT CHIP	0		
R4510	1-216-805-11	METAL CHIP	47	5%	1/10W
R4511	1-216-809-11	METAL CHIP	100	5%	1/10W
R4512	1-400-244-11	BEAD, FERRITE (CHIP) (1608)			
R4513	1-216-864-11	SHORT CHIP	0		
R4514	1-216-864-11	SHORT CHIP	0		
R4515	1-216-864-11	SHORT CHIP	0		
R4516	1-216-864-11	SHORT CHIP	0		
R4518	1-216-864-11	SHORT CHIP	0		
R4520	1-216-864-11	SHORT CHIP	0		
R4701	1-216-864-11	SHORT CHIP	0		
R4702	1-216-864-11	SHORT CHIP	0		
R4703	1-216-864-11	SHORT CHIP	0		
R4704	1-216-864-11	SHORT CHIP	0		
R4705	1-216-864-11	SHORT CHIP	0		
R4706	1-216-864-11	SHORT CHIP	0		
		< COMPOSITION CIRCUIT BLOCK >			
RB103	1-234-795-21	RES, NETWORK 0X4 (2010)			
RB104	1-234-795-21	RES, NETWORK 0X4 (2010)			
RB105	1-234-371-21	RES, NETWORK	47 (1005X4)		
RB106	1-234-371-21	RES, NETWORK	47 (1005X4)		
RB107	1-234-370-21	RES, NETWORK	22 (1005X4)		
RB108	1-234-370-21	RES, NETWORK	22 (1005X4)		
RB111	1-234-795-21	RES, NETWORK 0X4 (2010)			
RB112	1-234-370-21	RES, NETWORK	22 (1005X4)		
RB113	1-234-370-21	RES, NETWORK	22 (1005X4)		

Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X101	1-781-867-21	VIBRATOR, CRYSTAL (27MHz)			
**********					
		ENCODER BOARD			
		**********			
**********					
	A-1088-090-A	FL BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C800	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C801	1-163-037-11	CERAMIC CHIP	0.022uF	10%	50V
C802	1-126-967-11	ELECT	47uF	20%	50V
C803	1-124-584-00	ELECT	100uF	20%	10V
C804	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C805	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C806	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C807	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C808	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C809	1-126-795-11	ELECT	10uF	20%	50V
C810	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C811	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C812	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C813	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C814	1-126-795-11	ELECT	10uF	20%	50V
C815	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C816	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C817	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C818	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C819	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C820	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C821	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C822	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C823	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C824	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C825	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C826	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
		< CONNECTOR >			
CN801	1-779-556-21	CONNECTOR, FFC (LIF (NON-ZIF)) 19P			
CN802	1-779-546-11	CONNECTOR, FFC (LIF (NON-ZIF)) 9P			
* CN805	1-568-941-11	PIN, CONNECTOR 3P			
		< DIODE >			
D801	8-719-083-02	DIODE KDS160-RTK			
D802	8-719-083-02	DIODE KDS160-RTK			
D803	8-719-069-56	DIODE UDZSTE-176.2B			
D804	8-719-083-02	DIODE KDS160-RTK			
D805	8-719-083-02	DIODE KDS160-RTK			
		< FERRITE BEAD >			
FB806	1-414-813-11	FERRITE, EMI (SMD) (2012)			
		< FLUORESCENT INDICATOR >			
FL801	1-519-792-11	INDICATOR TUBE, FLUORESCENT			

Ref. No.	Part No.	Description			Remark
		< IC >			
IC801	6-600-349-21	IC NJL23H400A (R)			
IC802	8-759-643-83	IC uPD16315GB-3BS			
		< COIL >			
L801	1-410-671-31	INDUCTOR	47uH		
L802	1-410-671-31	INDUCTOR	47uH		
L805	1-400-135-11	INDUCTOR	1uH		
L806	1-400-135-11	INDUCTOR	1uH		
L807	1-400-135-11	INDUCTOR	1uH		
		< TRANSISTOR >			
Q801	6-550-065-01	TRANSISTOR	CPH5504-TL-E		
Q802	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
		< RESISTOR >			
R800	1-216-821-11	METAL CHIP	1K	5%	1/10W
R801	1-216-839-11	METAL CHIP	33K	5%	1/10W
R802	1-216-809-11	METAL CHIP	100	5%	1/10W
R804	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R805	1-216-295-91	SHORT CHIP	0		
R810	1-216-864-11	SHORT CHIP	0		
R811	1-216-844-11	METAL CHIP	82K	5%	1/10W
R812	1-216-845-11	METAL CHIP	100K	5%	1/10W
R813	1-216-845-11	METAL CHIP	100K	5%	1/10W
R814	1-216-809-11	METAL CHIP	100	5%	1/10W
R815	1-216-809-11	METAL CHIP	100	5%	1/10W
R816	1-216-809-11	METAL CHIP	100	5%	1/10W
R817	1-216-821-11	METAL CHIP	1K	5%	1/10W
R819	1-216-805-11	METAL CHIP	47	5%	1/10W
R820	1-216-845-11	METAL CHIP	100K	5%	1/10W
R825	1-216-864-11	SHORT CHIP	0		
R826	1-216-864-11	SHORT CHIP	0		
		< SWITCH >			
S800	1-418-632-11	ENCODER, ROTARY (VOLUME)			
		< TRANSFORMER >			
T801	1-443-645-11	TRANSFORMER, DC CONVERTER			
**********					
		H/P BOARD			
		**********			
		< CAPACITOR >			
C881	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C882	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C883	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C884	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C885	1-164-360-11	CERAMIC CHIP	0.1uF		16V
		< DIODE >			
D821	8-719-083-02	DIODE KDS160-RTK			
D822	8-719-083-02	DIODE KDS160-RTK			
		< TERMINAL BOARD >			
EB801	1-537-770-21	TERMINAL BOARD, GROUND			

Ref. No.	Part No.	Description			Remark
		< FERRITE BEAD >			
FB811	1-469-144-21	FERRITE, EMI (SMD) (2012)			
FB812	1-500-284-21	INDUCTOR, FERRITE BEAD			
FB813	1-469-144-21	FERRITE, EMI (SMD) (2012)			
FB814	1-216-295-91	SHORT CHIP	0		
		< JACK >			
J801	1-566-891-21	JACK (PHONES)			
		< COIL >			
L811	1-216-864-11	SHORT CHIP	0		
L812	1-469-144-21	FERRITE, EMI (SMD) (2012)			
L813	1-216-864-11	SHORT CHIP	0		
L814	1-469-144-21	FERRITE, EMI (SMD) (2012)			
		< TRANSISTOR >			
Q806	6-550-889-01	TRANSISTOR	2SC5938-T112-1B		
Q807	6-550-889-01	TRANSISTOR	2SC5938-T112-1B		
Q808	6-550-889-01	TRANSISTOR	2SC5938-T112-1B		
Q809	6-550-889-01	TRANSISTOR	2SC5938-T112-1B		
		< RESISTOR >			
R861	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R862	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R863	1-216-801-11	METAL CHIP	22	5%	1/10W
R864	1-216-801-11	METAL CHIP	22	5%	1/10W
R865	1-216-805-11	METAL CHIP	47	5%	1/10W
R866	1-216-805-11	METAL CHIP	47	5%	1/10W
R867	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R868	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R869	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R870	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
**********					
	A-1088-069-A	IO BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C102	1-126-933-11	ELECT	100uF	20%	16V
C103	1-104-662-91	ELECT	22uF	20%	25V
C104	1-104-662-91	ELECT	22uF	20%	25V
C200	1-216-864-11	SHORT CHIP	0		
C201	1-126-964-11	ELECT	10uF	20%	50V
C202	1-115-156-11	CERAMIC CHIP	1uF		10V
C203	1-115-156-11	CERAMIC CHIP	1uF		10V
C204	1-115-156-11	CERAMIC CHIP	1uF		10V
C205	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C207	1-126-964-11	ELECT	10uF	20%	50V
C208	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C209	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C210	1-126-925-91	ELECT	470uF	20%	10V
C212	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C213	1-126-933-11	ELECT	100uF	20%	16V
C214	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C223	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C224	1-126-916-11	ELECT	1000uF	20%	6.3V
C225	1-126-916-11	ELECT	1000uF	20%	6.3V
C226	1-126-916-11	ELECT	1000uF	20%	6.3V

IO **KEY** **LED**

Ref. No.	Part No.	Description			Remark
C227	1-126-933-11	ELECT	100uF	20%	16V
C228	1-126-933-11	ELECT	100uF	20%	16V
C242	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C603	1-126-933-11	ELECT	100uF	20%	16V
C604	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C606	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C607	1-104-662-91	ELECT	22uF	20%	25V
C608	1-126-933-11	ELECT	100uF	20%	16V
C609	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C610	1-104-662-91	ELECT	22uF	20%	25V
C611	1-104-662-91	ELECT	22uF	20%	25V
C612	1-104-662-91	ELECT	22uF	20%	25V
C624	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C625	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C626	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C629	1-126-960-11	ELECT	1uF	20%	50V
C630	1-126-960-11	ELECT	1uF	20%	50V
C632	1-104-662-91	ELECT	22uF	20%	25V
		< CONNECTOR >			
CN101	1-568-828-11	CONNECTOR, FFC 9P			
CN201	1-779-281-11	CONNECTOR, FFC (LIF (NON-ZIF)) 13P			
CN601	1-779-291-11	CONNECTOR, FFC (LIF (NON-ZIF)) 23P			
		< IC >			
IC201	6-705-602-01	IC MM1623BFBE			
IC602	8-759-385-76	IC MC14052 BDR2			
IC603	8-759-649-89	IC MC4558CD			
		< JACK >			
J200	1-764-593-21	JACK 2P (VIDEO/SAT)			
J201	1-780-211-11	TERMINAL BOARD (S TERMINAL+1P) (MONITOR OUT)			
J202	1-817-449-11	JACK, PIN 3P (COMPONENT VIDE OUT)			
		< COIL >			
L101	1-469-525-91	INDUCTOR	10uH		
L201	1-469-525-91	INDUCTOR	10uH		
L602	1-469-525-91	INDUCTOR	10uH		
		< TRANSISTOR >			
Q603	8-729-027-52	TRANSISTOR	DTC124EKA-T146		
Q604	8-729-027-52	TRANSISTOR	DTC124EKA-T146		
		< RESISTOR >			
R102	1-216-864-11	SHORT CHIP	0		
R105	1-216-845-11	METAL CHIP	100K	5%	1/10W
R106	1-216-841-11	METAL CHIP	47K	5%	1/10W
R107	1-216-841-11	METAL CHIP	47K	5%	1/10W
R109	1-216-864-11	SHORT CHIP	0		
R114	1-216-864-11	SHORT CHIP	0		
R115	1-216-845-11	METAL CHIP	100K	5%	1/10W
R116	1-216-845-11	METAL CHIP	100K	5%	1/10W
R117	1-216-845-11	METAL CHIP	100K	5%	1/10W
R203	1-216-864-11	SHORT CHIP	0		
R204	1-216-821-11	METAL CHIP	1K	5%	1/10W
R205	1-216-864-11	SHORT CHIP	0		
R206	1-216-864-11	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
R207	1-216-864-11	SHORT CHIP	0		
R209	1-216-864-11	SHORT CHIP	0		
R226	1-216-864-11	SHORT CHIP	0		
R228	1-216-833-11	METAL CHIP	10K	5%	1/10W
R229	1-218-285-11	METAL CHIP	75	5%	1/10W
R230	1-218-285-11	METAL CHIP	75	5%	1/10W
R231	1-218-285-11	METAL CHIP	75	5%	1/10W
R232	1-218-285-11	METAL CHIP	75	5%	1/10W
R233	1-218-285-11	METAL CHIP	75	5%	1/10W
R241	1-218-285-11	METAL CHIP	75	5%	1/10W
R263	1-216-833-11	METAL CHIP	10K	5%	1/10W
R608	1-216-841-11	METAL CHIP	47K	5%	1/10W
R609	1-216-817-11	METAL CHIP	470	5%	1/10W
R610	1-216-817-11	METAL CHIP	470	5%	1/10W
R611	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R612	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R613	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R614	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R615	1-216-841-11	METAL CHIP	47K	5%	1/10W
R616	1-216-841-11	METAL CHIP	47K	5%	1/10W
R617	1-216-821-11	METAL CHIP	1K	5%	1/10W
R618	1-216-833-11	METAL CHIP	10K	5%	1/10W
R619	1-216-821-11	METAL CHIP	1K	5%	1/10W
R620	1-216-833-11	METAL CHIP	10K	5%	1/10W
R624	1-216-841-11	METAL CHIP	47K	5%	1/10W
R627	1-216-841-11	METAL CHIP	47K	5%	1/10W
R628	1-216-841-11	METAL CHIP	47K	5%	1/10W
R635	1-216-841-11	METAL CHIP	47K	5%	1/10W
R650	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R651	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R654	1-216-841-11	METAL CHIP	47K	5%	1/10W
**********					
		KEY BOARD			
		**********			
		< RESISTOR >			
R851	1-216-821-11	METAL CHIP	1K	5%	1/10W
R852	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R853	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R855	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R856	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R857	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
		< SWITCH >			
S802	1-762-875-21	SWITCH, KEYBOARD (▷)			
S803	1-762-875-21	SWITCH, KEYBOARD (I◀◀)			
S804	1-762-875-21	SWITCH, KEYBOARD (▮▮)			
S805	1-762-875-21	SWITCH, KEYBOARD (■)			
S806	1-762-875-21	SWITCH, KEYBOARD (▶▶I)			
S807	1-762-875-21	SWITCH, KEYBOARD (FUNCTION)			
**********					
	A-1088-093-A	LED BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C832	1-164-360-11	CERAMIC CHIP	0.1uF		16V

Ref. No.	Part No.	Description			Remark
C834	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C836	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C837	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
		< CONNECTOR >			
CN803	1-779-546-11	CONNECTOR, FFC (LIF (NON-ZIF)) 9P			
		< DIODE >			
D811	8-719-079-89	DIODE SML-020MDT-T86 (DISC 1)			
D812	8-719-079-89	DIODE SML-020MDT-T86 (DISC 2)			
D813	8-719-079-89	DIODE SML-020MDT-T86 (DISC 3)			
D814	8-719-079-89	DIODE SML-020MDT-T86 (DISC 4)			
D815	8-719-079-89	DIODE SML-020MDT-T86 (DISC 5)			
		< IC >			
IC803	6-704-046-01	IC BU2099FV			
		< RESISTOR >			
R821	1-216-809-11	METAL CHIP	100	5%	1/10W
R822	1-216-809-11	METAL CHIP	100	5%	1/10W
R823	1-216-809-11	METAL CHIP	100	5%	1/10W
R824	1-216-864-11	SHORT CHIP	0		
R827	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R828	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R829	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R830	1-216-833-11	METAL CHIP	10K	5%	1/10W
R831	1-216-817-11	METAL CHIP	470	5%	1/10W
R832	1-216-817-11	METAL CHIP	470	5%	1/10W
R833	1-216-817-11	METAL CHIP	470	5%	1/10W
R834	1-216-817-11	METAL CHIP	470	5%	1/10W
R835	1-216-817-11	METAL CHIP	470	5%	1/10W
R836	1-216-817-11	METAL CHIP	470	5%	1/10W
R837	1-216-817-11	METAL CHIP	470	5%	1/10W
R838	1-216-817-11	METAL CHIP	470	5%	1/10W
R839	1-216-817-11	METAL CHIP	470	5%	1/10W
R840	1-216-817-11	METAL CHIP	470	5%	1/10W
R841	1-216-837-11	METAL CHIP	22K	5%	1/10W
R842	1-216-821-11	METAL CHIP	1K	5%	1/10W
		< SWITCH >			
S808	1-762-875-21	SWITCH, KEYBOARD (⏏)			
S809	1-762-875-21	SWITCH, KEYBOARD (DISC 5)			
S810	1-762-875-21	SWITCH, KEYBOARD (DISC 4)			
S811	1-762-875-21	SWITCH, KEYBOARD (DISC 3)			
S812	1-762-875-21	SWITCH, KEYBOARD (DISC 2)			
S813	1-762-875-21	SWITCH, KEYBOARD (DISC 1)			
**********					
	A-1088-066-A	MAIN BOARD, COMPLETE (DX150: US, CND)			
	A-1104-401-A	MAIN BOARD, COMPLETE (MX)			
	A-1104-416-A	MAIN BOARD, COMPLETE (AUS)			
	A-1104-552-A	MAIN BOARD, COMPLETE (DX170)			
	A-1105-147-A	MAIN BOARD, COMPLETE (DX250)			
	A-1110-722-A	MAIN BOARD, COMPLETE (EA)			
	A-1110-742-A	MAIN BOARD, COMPLETE (E32)			
	A-1110-778-A	MAIN BOARD, COMPLETE (SP)			
		**********			
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3			

Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C101	1-164-346-11	CERAMIC CHIP	1uF		16V
C102	1-164-346-11	CERAMIC CHIP	1uF		16V
C103	1-164-346-11	CERAMIC CHIP	1uF		16V
C104	1-164-346-11	CERAMIC CHIP	1uF		16V
C105	1-164-346-11	CERAMIC CHIP	1uF		16V
C106	1-164-346-11	CERAMIC CHIP	1uF		16V
C107	1-164-346-11	CERAMIC CHIP	1uF		16V
					(DX170/DX250)
C111	1-164-346-11	CERAMIC CHIP	1uF		16V
C112	1-164-346-11	CERAMIC CHIP	1uF		16V
C113	1-164-346-11	CERAMIC CHIP	1uF		16V
C114	1-164-346-11	CERAMIC CHIP	1uF		16V
C115	1-164-346-11	CERAMIC CHIP	1uF		16V
C116	1-164-346-11	CERAMIC CHIP	1uF		16V
C117	1-164-346-11	CERAMIC CHIP	1uF		16V
					(DX170/DX250)
C131	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C132	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C133	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C134	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C135	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C136	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C137	1-164-156-11	CERAMIC CHIP	0.1uF		25V
					(DX170/DX250)
C141	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C142	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C143	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C144	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C145	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C146	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C147	1-164-156-11	CERAMIC CHIP	0.1uF		25V
					(DX170/DX250)
C151	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C152	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C153	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C154	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C155	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C156	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C157	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
					(DX170/DX250)
C158	1-126-947-11	ELECT	47uF	20%	35V
C161	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C162	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C163	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C164	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C165	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C166	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C167	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
					(DX170/DX250)
C171	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C172	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C173	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C174	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C175	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C176	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C177	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
					(DX170/DX250)

MAIN

Ref. No.	Part No.	Description			Remark
C181	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C182	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C183	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C184	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C185	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C186	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C187	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V (DX170/DX250)
C188	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C189	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C190	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C191	1-107-898-11	ELECT	2200uF	20%	35V
C192	1-107-898-11	ELECT	2200uF	20%	35V
C193	1-107-898-11	ELECT	2200uF	20%	35V
C194	1-107-898-11	ELECT	2200uF	20%	35V
C195	1-107-898-11	ELECT	2200uF	20%	35V
C196	1-107-898-11	ELECT	2200uF	20%	35V
C197	1-107-898-11	ELECT	2200uF	20%	35V (DX170/DX250)
C198	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C199	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C200	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C201	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C202	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C203	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C204	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C205	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C206	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C207	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C208	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C209	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C210	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C211	1-136-177-00	FILM	1uF	5%	50V
C212	1-136-177-00	FILM	1uF	5%	50V
C213	1-136-177-00	FILM	1uF	5%	50V
C214	1-136-177-00	FILM	1uF	5%	50V
C215	1-136-177-00	FILM	1uF	5%	50V
C216	1-136-177-00	FILM	1uF	5%	50V
C217	1-136-177-00	FILM	1uF	5%	50V (DX170/DX250)
C218	1-164-156-11	CERAMIC CHIP	0.1uF		25V (DX170/DX250)
C221	1-136-177-00	FILM	1uF	5%	50V
C222	1-136-177-00	FILM	1uF	5%	50V
C223	1-136-177-00	FILM	1uF	5%	50V
C224	1-136-177-00	FILM	1uF	5%	50V
C225	1-136-177-00	FILM	1uF	5%	50V
C226	1-136-177-00	FILM	1uF	5%	50V
C227	1-136-177-00	FILM	1uF	5%	50V (DX170/DX250)
C248	1-126-947-11	ELECT	47uF	20%	35V
C251	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C252	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C253	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C254	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C255	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C256	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C257	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V (DX170/DX250)

Ref. No.	Part No.	Description			Remark
C261	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C262	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C263	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C264	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C265	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C266	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C267	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V (DX170/DX250)
C268	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C269	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C271	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C272	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C273	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V (DX170/DX250)
C274	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V (DX170/DX250)
C275	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C276	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C277	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C278	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C279	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C280	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C281	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C282	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C283	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C284	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C285	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C286	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C287	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C288	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C289	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C290	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C291	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C292	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C293	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V (DX170/DX250)
C294	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V (DX170/DX250)
C296	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C297	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C298	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C299	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C301	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C302	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C303	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C304	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C305	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C306	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C307	1-126-960-11	ELECT	1uF	20%	50V
C308	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C309	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C310	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C311	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C312	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C313	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C314	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C315	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C316	1-164-156-11	CERAMIC CHIP	0.1uF		25V

Ref. No.	Part No.	Description			Remark
C317	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C318	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C319	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C320	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C321	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C322	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C323	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C324	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C325	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C326	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C327	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C328	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C329	1-126-947-11	ELECT	47uF	20%	35V
C332	1-126-947-11	ELECT	47uF	20%	35V
C335	1-126-947-11	ELECT	47uF	20%	35V
C350	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C351	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C352	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C353	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C354	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C356	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C357	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C358	1-126-925-91	ELECT	470uF	20%	10V
C359	1-126-925-91	ELECT	470uF	20%	10V
C360	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C361	1-126-947-11	ELECT	47uF	20%	35V
C362	1-104-658-91	ELECT	100uF	20%	10V
C363	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C366	1-126-934-11	ELECT	220uF	20%	16V
C367	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C368	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C371	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C372	1-126-960-11	ELECT	1uF	20%	50V
C374	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C375	1-126-933-11	ELECT	100uF	20%	16V
C377	1-126-964-11	ELECT	10uF	20%	50V
C380	1-126-923-91	ELECT	220uF	20%	10V
C381	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C382	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C383	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C384	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V
C385	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C391	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C392	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C393	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C394	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C395	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C396	1-117-370-11	CERAMIC CHIP	10uF		10V
C402	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C403	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C404	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C405	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C406	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C436	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C501	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C502	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C525	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C547	1-162-923-11	CERAMIC CHIP	47PF	5%	50V

Ref. No.	Part No.	Description			Remark
C548	1-216-864-11	SHORT CHIP	0		
C570	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C571	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C572	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C580	1-104-656-11	ELECT	2200uF	20%	6.3V
C582	1-104-658-91	ELECT	100uF	20%	10V
C583	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C587	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C589	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C594	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C595	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C596	1-126-947-11	ELECT	47uF	20%	35V
C597	1-165-112-11	CERAMIC CHIP	0.33uF		16V
C598	1-165-112-11	CERAMIC CHIP	0.33uF		16V
C601	1-126-947-11	ELECT	47uF	20%	35V
C602	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C603	1-104-658-91	ELECT	100uF	20%	10V
C606	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C608	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C712	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C716	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C762	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C798	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C799	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C856	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C875	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
⚠C901	1-165-529-11	MYLAR	0.22uF	10	275V
⚠C902	1-165-529-11	MYLAR	0.22uF	10	275V
⚠C903	1-112-330-11	ELECT (BLOCK)	1000uF	20%	200V (US, CND)
⚠C903	1-112-331-11	ELECT (BLOCK)	1000uF	20%	250V (MX)
⚠C903	1-112-333-11	ELECT (BLOCK)	330uF	20%	450V (E32, EA, SP, AUS)
⚠C905	1-112-334-91	FILM	0.01uF	5%	400V (US, CND, MX)
⚠C906	1-100-613-81	CERAMIC	470PF	5%	1KV (E32, EA, SP, AUS)
⚠C906	1-112-473-11	CERAMIC	0.0015uF	10%	500V (US, CND, MX)
⚠C907	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (E32, EA, SP, AUS)
⚠C907	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V (US, CND, MX)
⚠C908	1-107-909-11	ELECT	47uF	20%	50V
⚠C909	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
⚠C910	1-107-906-11	ELECT	10uF	20%	50V
⚠C911	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
⚠C912	1-117-693-11	CERAMIC	100PF	10%	250V (E32, EA, SP, AUS)
⚠C912	1-113-907-51	CERAMIC	0.0022uF	20%	250V (US, CND, MX)
⚠C913	1-117-693-11	CERAMIC	100PF	10%	250V
⚠C918	1-113-925-11	CERAMIC	0.01uF	20%	250V
⚠C920	1-113-925-11	CERAMIC	0.01uF	20%	250V
⚠C921	1-165-136-11	CERAMIC	3300PF	10%	500V
⚠C922	1-126-965-11	ELECT	22uF	20%	50V
⚠C923	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
⚠C924	1-124-257-00	ELECT	2.2uF	20%	50V

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MAIN

Ref. No.	Part No.	Description			Remark
⚠C925	1-107-974-81	CAP, CERAMIC	47PF SL (DX170/DX250)		
⚠C928	1-113-896-11	CERAMIC	220PF	10%	250V
⚠C929	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C931	1-117-580-91	FILM	47000PF	5%	630V (US, CND, MX)
C932	1-100-924-21	ELECT	2200uF	20%	35V
C933	1-100-924-21	ELECT	2200uF	20%	35V
C934	1-107-898-11	ELECT	2200uF	20%	35V
C935	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C936	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C937	1-100-756-91	CERAMIC CHIP	0.047uF		50V
⚠C938	1-113-898-11	CERAMIC	330PF	10%	250V (US, CND, MX)
⚠C938	1-117-698-51	CERAMIC	680PF	10%	250V (E32, EA, SP, AUS)
C939	1-135-621-51	FILM	2.2uF	5%	50V
C940	1-128-947-31	ELECT	3300uF	20%	10V
C941	1-128-954-21	ELECT	1000uF	20%	25V
C942	1-126-965-11	ELECT	22uF	20%	50V
C943	1-126-933-11	ELECT	100uF	20%	16V
C944	1-128-951-21	ELECT	2200uF	20%	16V
C945	1-126-965-11	ELECT	22uF	20%	50V
C946	1-128-950-21	ELECT	1000uF	20%	16V
C947	1-104-658-91	ELECT	100uF	20%	10V
C948	1-126-965-11	ELECT	22uF	20%	50V
C949	1-165-722-31	ELECT	100uF	20%	10V
C951	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C952	1-100-756-91	CERAMIC CHIP	0.047uF		50V
C953	1-117-214-11	CERAMIC	0.001uF	10%	2KV
C954	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C955	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
⚠C963	1-117-698-51	CERAMIC	680PF	10%	250V (US, CND, MX)
⚠C963	1-117-699-11	CERAMIC	0.001uF	99%	250V (E32, EA, SP, AUS)
⚠C964	1-117-698-51	CERAMIC	680PF	10%	250V (US, CND, MX)
⚠C964	1-117-699-11	CERAMIC	0.001uF	99%	250V (E32, EA, SP, AUS)
⚠C965	1-113-896-11	CERAMIC	220PF	10%	250V (E32, EA, SP, AUS)
⚠C966	1-113-896-11	CERAMIC	220PF	10%	250V (E32, EA, SP, AUS)
		< CONNECTOR >			
CN300	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* CN309	1-568-954-11	PIN, CONNECTOR 5P			
CN503	1-784-366-21	CONNECTOR, FFC/FPC 7P			
CN504	1-784-370-21	CONNECTOR, FFC/FPC 11P			
CN505	1-784-370-21	CONNECTOR, FFC/FPC 11P			
CN507	1-793-991-11	FFC/CONNECTOR, FPC (LIF (NON-ZIF)) 23P			
CN508	1-778-692-11	CONNECTOR, FFC/FPC 21P			
CN509	1-779-287-11	CONNECTOR, FFC (LIF (NON-ZIF)) 19P			
CN510	1-784-368-11	CONNECTOR, FFC/FPC 9P			
CN901	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
		< DIODE >			
D101	6-500-260-01	DIODE P6SMB39AT3			
D102	6-500-260-01	DIODE P6SMB39AT3			
D103	6-500-260-01	DIODE P6SMB39AT3			
D104	6-500-260-01	DIODE P6SMB39AT3			
D105	6-500-260-01	DIODE P6SMB39AT3			
D106	6-500-260-01	DIODE P6SMB39AT3			
D107	6-500-260-01	DIODE P6SMB39AT3 (DX170/DX250)			
D201	6-500-260-01	DIODE P6SMB39AT3			
D202	6-500-260-01	DIODE P6SMB39AT3			
D203	6-500-260-01	DIODE P6SMB39AT3			
D204	6-500-260-01	DIODE P6SMB39AT3			
D205	6-500-260-01	DIODE P6SMB39AT3			
D206	6-500-260-01	DIODE P6SMB39AT3			
D207	6-500-260-01	DIODE P6SMB39AT3 (DX170/DX250)			
D303	8-719-083-02	DIODE KDS160-RTK			
D304	8-719-083-02	DIODE KDS160-RTK			
D503	8-719-988-61	DIODE 1SS355TE-17			
D504	8-719-988-61	DIODE 1SS355TE-17			
D505	8-719-988-61	DIODE 1SS355TE-17			
D506	8-719-988-61	DIODE 1SS355TE-17			
⚠D901	8-719-082-57	DIODE D5SBA60F01			
⚠D905	8-719-063-74	DIODE D1NL20U-TR2			
⚠D906	8-719-083-02	DIODE KDS160-RTK (E32, EA, SP, AUS)			
⚠D906	8-719-988-61	DIODE 1SS355TE-17 (US, CND, MX)			
⚠D907	8-719-083-02	DIODE KDS160-RTK (E32, EA, SP, AUS)			
⚠D907	8-719-988-61	DIODE 1SS355TE-17 (US, CND, MX)			
⚠D908	8-719-083-02	DIODE KDS160-RTK (E32, EA, SP, AUS)			
⚠D908	8-719-988-61	DIODE 1SS355TE-17 (US, CND, MX)			
⚠D909	8-719-083-02	DIODE KDS160-RTK (E32, EA, SP, AUS)			
⚠D909	8-719-988-61	DIODE 1SS355TE-17 (US, CND, MX)			
⚠D910	8-719-083-02	DIODE KDS160-RTK (E32, EA, SP, AUS)			
⚠D910	8-719-988-61	DIODE 1SS355TE-17 (US, CND, MX)			
⚠D913	6-500-241-01	DIODE SARS03			
⚠D914	8-719-083-02	DIODE KDS160-RTK (E32, EA, SP, AUS)			
⚠D914	8-719-988-61	DIODE 1SS355TE-17 (US, CND, MX)			
⚠D915	8-719-977-28	DIODE DTZ10B			
⚠D921	6-500-849-01	DIODE ERA22-08KFLB			
⚠D922	8-719-063-74	DIODE D1NL20U-TR2			
⚠D923	8-719-977-28	DIODE DTZ10B			
⚠D924	8-719-083-69	DIODE UDZSTE-1724B			
⚠D925	8-719-069-54	DIODE UDZSTE-175.1B			
D931	6-500-383-01	DIODE YG906C2R			
D932	8-719-069-54	DIODE UDZSTE-175.1B			
D941	8-719-063-74	DIODE D1NL20U-TR2			
D942	8-719-080-53	DIODE RK36LF-B3			
D943	8-719-080-53	DIODE RK36LF-B3			
D944	6-500-288-11	DIODE EK19LF-F7			
D945	8-719-083-67	DIODE UDZSTE-1720B			
		< TERMINAL BOARD >			
EB901	1-537-770-21	TERMINAL BOARD, GROUND			
EB902	1-537-770-21	TERMINAL BOARD, GROUND			
EB903	1-537-770-21	TERMINAL BOARD, GROUND			
EB904	1-537-770-21	TERMINAL BOARD, GROUND			
EB905	1-537-770-21	TERMINAL BOARD, GROUND			
EB906	1-537-770-21	TERMINAL BOARD, GROUND			
EB907	1-537-770-21	TERMINAL BOARD, GROUND			

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Ref. No.	Part No.	Description	Remark
EB908	1-537-770-21	TERMINAL BOARD, GROUND	
EB909	1-537-770-21	TERMINAL BOARD, GROUND	
EB910	1-537-770-21	TERMINAL BOARD, GROUND	
EB911	1-537-770-21	TERMINAL BOARD, GROUND	
		< FERRITE BEAD >	
FB301	1-469-760-21	FERRITE, EMI (SMD) (2012)	
FB302	1-216-295-91	SHORT CHIP 0	
FB501	1-216-295-91	SHORT CHIP 0	
FB902	1-410-396-41	FERRITE 0.45uH	
⚠FB905	1-410-396-41	FERRITE 0.45uH	
		< IC >	
IC101	6-705-695-01	IC CXD9775M	
IC102	6-705-695-01	IC CXD9775M	
IC103	6-705-695-01	IC CXD9775M	
IC104	6-705-695-01	IC CXD9775M	
IC105	6-705-695-01	IC CXD9775M	
IC106	6-705-695-01	IC CXD9775M	
IC107	6-705-695-01	IC CXD9775M (DX170/DX250)	
IC108	6-707-939-01	IC CXD9843AR	
IC109	6-707-939-01	IC CXD9843AR	
IC110	6-707-939-01	IC CXD9843AR	
IC301	6-705-720-01	IC RC4580IDR	
IC303	6-702-300-01	IC TK11118CSCL-G	
IC305	8-759-649-50	IC SN74AHC1GU04DCKR	
IC503	6-704-768-01	IC SN74AHC2G157HDCU3	
IC504	6-707-095-01	IC BH2210FV-E2	
IC509	6-805-070-01	IC M30622MEP-A08FPU0	
IC510	6-707-095-01	IC BH2210FV-E2	
IC511	6-701-680-01	IC PST3629NR	
IC515	6-703-550-01	IC TA7809LS	
IC516	6-703-547-01	IC TA7805LS	
⚠IC901	6-707-741-01	IC STR-F6138-LF1352 (US, CND, MX)	
⚠IC901	6-707-742-11	IC STR-F6168-LF1352 (E32, EA, SP, AUS)	
⚠IC921	6-707-740-01	IC STR-V153	
IC931	8-759-648-34	IC TA76431AS (TPE6)	
IC941	6-707-746-01	IC SI-3120KM-TL	
IC942	6-707-745-10	IC SI-3050KM-TL	
IC943	6-707-744-01	IC SI-3033KM-TL	
IC951	6-707-743-01	IC TA76L431S (TPE6, Q)	
		< JACK >	
J201	1-780-202-11	TERMINAL BOARD (SP) (4P) (SPEAKER)	
J202	1-780-203-11	TERMINAL BOARD (SP) (2P) (SPEAKER)	
		< COIL >	
L101	1-457-078-11	AIR-CORE COIL	
L102	1-457-078-11	AIR-CORE COIL	
L103	1-457-078-11	AIR-CORE COIL	
L104	1-457-078-11	AIR-CORE COIL	
L105	1-457-078-11	AIR-CORE COIL	
L106	1-457-078-11	AIR-CORE COIL	
L111	1-457-077-11	AIR-CORE COIL	
L112	1-457-077-11	AIR-CORE COIL	
L113	1-457-077-11	AIR-CORE COIL	
L114	1-457-077-11	AIR-CORE COIL	
L115	1-457-077-11	AIR-CORE COIL	

Ref. No.	Part No.	Description	Remark
L116	1-457-077-11	AIR-CORE COIL	
L121	1-456-680-11	INDUCTOR 10uH	
L122	1-456-680-11	INDUCTOR 10uH	
L123	1-456-680-11	INDUCTOR 10uH	
L124	1-456-680-11	INDUCTOR 10uH	
L125	1-456-680-11	INDUCTOR 10uH	
L126	1-456-680-11	INDUCTOR 10uH	
L127	1-456-680-11	INDUCTOR 10uH (DX170/DX250)	
L131	1-456-680-11	INDUCTOR 10uH	
L132	1-456-680-11	INDUCTOR 10uH	
L133	1-456-680-11	INDUCTOR 10uH	
L134	1-456-680-11	INDUCTOR 10uH	
L135	1-456-680-11	INDUCTOR 10uH	
L136	1-456-680-11	INDUCTOR 10uH	
L137	1-456-680-11	INDUCTOR 10uH (DX170/DX250)	
L301	1-414-754-11	INDUCTOR 10uH	
L302	1-412-939-11	INDUCTOR 1uH	
L931	1-457-058-11	COIL, CHOKE 10uH (US, CND, MX)	
L941	1-414-398-11	INDUCTOR 10uH	
L942	1-414-398-11	INDUCTOR 10uH	
L945	1-414-398-11	INDUCTOR 10uH	
L947	1-414-398-11	INDUCTOR 10uH	
L948	1-414-398-11	INDUCTOR 10uH	
L951	1-414-398-11	INDUCTOR 10uH	
		< LINE FILTER >	
⚠LF901	1-457-054-11	LINE FILTER COIL (US, CND, MX)	
		< IC >	
⚠PC901	6-600-438-01	IC TLP421F (D4-GR)	
⚠PC902	6-600-438-01	IC TLP421F (D4-GR)	
⚠PC903	6-600-438-01	IC TLP421F (D4-GR)	
		< TRANSISTOR >	
Q101	8-729-600-22	TRANSISTOR 2SA1235-F	
Q102	8-729-600-22	TRANSISTOR 2SA1235-F	
Q103	8-729-600-22	TRANSISTOR 2SA1235-F	
Q104	8-729-600-22	TRANSISTOR 2SA1235-F	
Q105	8-729-600-22	TRANSISTOR 2SA1235-F	
Q106	8-729-600-22	TRANSISTOR 2SA1235-F	
Q107	8-729-600-22	TRANSISTOR 2SA1235-F	
Q108	8-729-600-22	TRANSISTOR 2SA1235-F	
Q109	8-729-600-22	TRANSISTOR 2SA1235-F	
Q110	8-729-600-22	TRANSISTOR 2SA1235-F	
Q111	8-729-600-22	TRANSISTOR 2SA1235-F	
Q112	8-729-600-22	TRANSISTOR 2SA1235-F	
Q301	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q302	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q303	8-729-111-29	TRANSISTOR 2SD1616A-K	
Q304	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q506	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q507	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q901	8-729-140-04	TRANSISTOR 2SB1116A-L	
Q921	8-729-142-51	TRANSISTOR 2SD1616A-TP-LK	
Q943	1-801-806-11	TRANSISTOR DTC144EKA	

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MAIN

Ref. No.	Part No.	Description			Remark
Q945	6-550-718-01	TRANSISTOR	RSR025N03TL		
Q947	1-801-806-11	TRANSISTOR	DTC144EKA		
		< RESISTOR >			
R108	1-216-837-11	METAL CHIP	22K	5%	1/10W
R109	1-216-837-11	METAL CHIP	22K	5%	1/10W
R110	1-216-837-11	METAL CHIP	22K	5%	1/10W
R111	1-216-837-11	METAL CHIP	22K	5%	1/10W
R112	1-216-837-11	METAL CHIP	22K	5%	1/10W
R113	1-216-837-11	METAL CHIP	22K	5%	1/10W
R114	1-216-837-11	METAL CHIP	22K	5%	1/10W
R115	1-216-837-11	METAL CHIP	22K	5%	1/10W
R116	1-216-837-11	METAL CHIP	22K	5%	1/10W
R117	1-216-837-11	METAL CHIP	22K	5%	1/10W
R118	1-216-837-11	METAL CHIP	22K	5%	1/10W
R119	1-216-837-11	METAL CHIP	22K	5%	1/10W
R120	1-216-837-11	METAL CHIP	22K	5%	1/10W
					(DX170/DX250)
R128	1-216-837-11	METAL CHIP	22K	5%	1/10W
					(DX170/DX250)
R131	1-216-864-11	SHORT CHIP	0		
R132	1-216-864-11	SHORT CHIP	0		
R133	1-216-864-11	SHORT CHIP	0		
R134	1-216-864-11	SHORT CHIP	0		
R135	1-216-864-11	SHORT CHIP	0		
R136	1-216-864-11	SHORT CHIP	0		
R137	1-216-864-11	SHORT CHIP	0 (DX170/DX250)		
R139	1-216-864-11	SHORT CHIP	0		
R141	1-216-864-11	SHORT CHIP	0		
R142	1-216-864-11	SHORT CHIP	0		
R143	1-216-864-11	SHORT CHIP	0		
R144	1-216-864-11	SHORT CHIP	0		
R145	1-216-864-11	SHORT CHIP	0		
R146	1-216-864-11	SHORT CHIP	0		
R147	1-216-864-11	SHORT CHIP	0 (DX170/DX250)		
R151	1-216-864-11	SHORT CHIP	0		
R152	1-216-864-11	SHORT CHIP	0		
R153	1-216-864-11	SHORT CHIP	0		
R154	1-216-864-11	SHORT CHIP	0		
R155	1-216-864-11	SHORT CHIP	0		
R156	1-216-864-11	SHORT CHIP	0		
R157	1-216-864-11	SHORT CHIP	0 (DX170/DX250)		
R161	1-216-864-11	SHORT CHIP	0		
R162	1-216-864-11	SHORT CHIP	0		
R163	1-216-864-11	SHORT CHIP	0		
R164	1-216-864-11	SHORT CHIP	0		
R165	1-216-864-11	SHORT CHIP	0		
R166	1-216-864-11	SHORT CHIP	0		
R167	1-216-864-11	SHORT CHIP	0 (DX170/DX250)		
R171	1-216-864-11	SHORT CHIP	0		
R172	1-216-864-11	SHORT CHIP	0		
R173	1-216-864-11	SHORT CHIP	0		
R174	1-216-864-11	SHORT CHIP	0		
R175	1-216-864-11	SHORT CHIP	0		
R176	1-216-864-11	SHORT CHIP	0		
R177	1-216-864-11	SHORT CHIP	0 (DX170/DX250)		
R191	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R192	1-220-942-11	METAL CHIP	3.3	1%	1/4W

Ref. No.	Part No.	Description			Remark
R193	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R194	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R195	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R196	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R197	1-220-942-11	METAL CHIP	3.3	1%	1/4W
					(DX170/DX250)
R201	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R202	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R203	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R204	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R205	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R206	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R207	1-220-942-11	METAL CHIP	3.3	1%	1/4W
					(DX170/DX250)
R211	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R212	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R213	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R214	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R215	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R216	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R217	1-216-136-00	RES-CHIP	2.7	5%	1/8W
					(DX170/DX250)
R221	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R222	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R223	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R224	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R225	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R226	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R227	1-216-136-00	RES-CHIP	2.7	5%	1/8W
					(DX170/DX250)
R241	1-216-809-11	METAL CHIP	100	5%	1/10W
R242	1-216-809-11	METAL CHIP	100	5%	1/10W
R243	1-216-809-11	METAL CHIP	100	5%	1/10W
R244	1-216-809-11	METAL CHIP	100	5%	1/10W
R245	1-216-809-11	METAL CHIP	100	5%	1/10W
R246	1-216-809-11	METAL CHIP	100	5%	1/10W
R247	1-216-809-11	METAL CHIP	100	5%	1/10W
					(DX170/DX250)
R300	1-216-809-11	METAL CHIP	100	5%	1/10W
R302	1-216-809-11	METAL CHIP	100	5%	1/10W
R303	1-216-809-11	METAL CHIP	100	5%	1/10W
R304	1-216-809-11	METAL CHIP	100	5%	1/10W
R305	1-216-809-11	METAL CHIP	100	5%	1/10W
R306	1-216-809-11	METAL CHIP	100	5%	1/10W
R308	1-216-809-11	METAL CHIP	100	5%	1/10W
R309	1-216-809-11	METAL CHIP	100	5%	1/10W
R310	1-216-809-11	METAL CHIP	100	5%	1/10W
R311	1-216-809-11	METAL CHIP	100	5%	1/10W
R312	1-216-809-11	METAL CHIP	100	5%	1/10W
R313	1-216-864-11	SHORT CHIP	0		
R314	1-216-809-11	METAL CHIP	100	5%	1/10W
R315	1-216-864-11	SHORT CHIP	0		
R316	1-216-817-11	METAL CHIP	470	5%	1/10W
R317	1-216-817-11	METAL CHIP	470	5%	1/10W
R318	1-216-817-11	METAL CHIP	470	5%	1/10W
R319	1-216-833-11	METAL CHIP	10K	5%	1/10W
R320	1-216-864-11	SHORT CHIP	0		
R321	1-216-864-11	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
R322	1-216-833-11	METAL CHIP	10K	5%	1/10W
R323	1-216-864-11	SHORT CHIP	0		
R324	1-216-864-11	SHORT CHIP	0		
R325	1-216-864-11	SHORT CHIP	0		
R326	1-216-864-11	SHORT CHIP	0		
R327	1-216-864-11	SHORT CHIP	0		
R328	1-216-864-11	SHORT CHIP	0		
R329	1-216-864-11	SHORT CHIP	0		
R330	1-216-837-11	METAL CHIP	22K	5%	1/10W
R331	1-216-837-11	METAL CHIP	22K	5%	1/10W
R332	1-216-837-11	METAL CHIP	22K	5%	1/10W
R333	1-216-837-11	METAL CHIP	22K	5%	1/10W
R334	1-216-837-11	METAL CHIP	22K	5%	1/10W
R335	1-216-837-11	METAL CHIP	22K	5%	1/10W
R336	1-216-837-11	METAL CHIP	22K	5%	1/10W
R337	1-216-837-11	METAL CHIP	22K	5%	1/10W
R338	1-216-837-11	METAL CHIP	22K	5%	1/10W
R339	1-216-837-11	METAL CHIP	22K	5%	1/10W
R340	1-216-839-11	METAL CHIP	33K	5%	1/10W
R341	1-216-839-11	METAL CHIP	33K	5%	1/10W
R342	1-216-864-11	SHORT CHIP	0		
R343	1-216-864-11	SHORT CHIP	0		
R344	1-216-817-11	METAL CHIP	470	5%	1/10W
R345	1-216-833-11	METAL CHIP	10K	5%	1/10W
R346	1-216-817-11	METAL CHIP	470	5%	1/10W
R347	1-216-833-11	METAL CHIP	10K	5%	1/10W
R348	1-216-817-11	METAL CHIP	470	5%	1/10W
R349	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R350	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R351	1-216-809-11	METAL CHIP	100	5%	1/10W
R353	1-216-809-11	METAL CHIP	100	5%	1/10W
R354	1-216-809-11	METAL CHIP	100	5%	1/10W
R355	1-216-809-11	METAL CHIP	100	5%	1/10W
R356	1-216-803-11	METAL CHIP	33	5%	1/10W
R357	1-216-803-11	METAL CHIP	33	5%	1/10W
R358	1-216-803-11	METAL CHIP	33	5%	1/10W
R361	1-216-845-11	METAL CHIP	100K	5%	1/10W
R362	1-216-845-11	METAL CHIP	100K	5%	1/10W
R363	1-216-845-11	METAL CHIP	100K	5%	1/10W
R364	1-216-845-11	METAL CHIP	100K	5%	1/10W
R365	1-216-845-11	METAL CHIP	100K	5%	1/10W
R366	1-216-845-11	METAL CHIP	100K	5%	1/10W
R371	1-216-818-11	METAL CHIP	560	5%	1/10W
R372	1-216-818-11	METAL CHIP	560	5%	1/10W
R373	1-216-818-11	METAL CHIP	560	5%	1/10W
R374	1-216-818-11	METAL CHIP	560	5%	1/10W
R375	1-216-818-11	METAL CHIP	560	5%	1/10W
R376	1-216-818-11	METAL CHIP	560	5%	1/10W
R377	1-216-818-11	METAL CHIP	560	5%	1/10W
R378	1-216-818-11	METAL CHIP	560	5%	1/10W
R379	1-216-818-11	METAL CHIP	560	5%	1/10W
R380	1-216-818-11	METAL CHIP	560	5%	1/10W
R381	1-216-818-11	METAL CHIP	560	5%	1/10W
R382	1-216-818-11	METAL CHIP	560	5%	1/10W
R383	1-216-818-11	METAL CHIP	560	5%	1/10W (DX170/DX250)
R384	1-216-818-11	METAL CHIP	560	5%	1/10W (DX170/DX250)

Ref. No.	Part No.	Description			Remark
R393	1-216-801-11	METAL CHIP	22	5%	1/10W
R394	1-216-857-11	METAL CHIP	1M	5%	1/10W
R395	1-216-845-11	METAL CHIP	100K	5%	1/10W
R396	1-216-809-11	METAL CHIP	100	5%	1/10W
R400	1-216-845-11	METAL CHIP	100K	5%	1/10W
R401	1-216-845-11	METAL CHIP	100K	5%	1/10W
R402	1-216-845-11	METAL CHIP	100K	5%	1/10W
R403	1-216-845-11	METAL CHIP	100K	5%	1/10W
R404	1-216-845-11	METAL CHIP	100K	5%	1/10W
R405	1-216-845-11	METAL CHIP	100K	5%	1/10W
R406	1-216-845-11	METAL CHIP	100K	5%	1/10W
R407	1-216-845-11	METAL CHIP	100K	5%	1/10W
R408	1-216-845-11	METAL CHIP	100K	5%	1/10W
R409	1-216-845-11	METAL CHIP	100K	5%	1/10W
R410	1-216-845-11	METAL CHIP	100K	5%	1/10W
R411	1-216-845-11	METAL CHIP	100K	5%	1/10W
R412	1-216-845-11	METAL CHIP	100K	5%	1/10W
R424	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R426	1-216-833-11	METAL CHIP	10K	5%	1/10W
R427	1-216-833-11	METAL CHIP	10K	5%	1/10W
R428	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R429	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R430	1-216-833-11	METAL CHIP	10K	5%	1/10W
R431	1-216-845-11	METAL CHIP	100K	5%	1/10W
R450	1-216-833-11	METAL CHIP	10K	5%	1/10W
R451	1-216-833-11	METAL CHIP	10K	5%	1/10W
R452	1-216-833-11	METAL CHIP	10K	5%	1/10W
R453	1-216-833-11	METAL CHIP	10K	5%	1/10W
R456	1-216-833-11	METAL CHIP	10K	5%	1/10W
R457	1-216-833-11	METAL CHIP	10K	5%	1/10W
R458	1-216-833-11	METAL CHIP	10K	5%	1/10W
R459	1-216-833-11	METAL CHIP	10K	5%	1/10W
R460	1-216-833-11	METAL CHIP	10K	5%	1/10W
R461	1-216-833-11	METAL CHIP	10K	5%	1/10W
R462	1-216-833-11	METAL CHIP	10K	5%	1/10W
R463	1-216-833-11	METAL CHIP	10K	5%	1/10W
R464	1-216-833-11	METAL CHIP	10K	5%	1/10W
R472	1-216-864-11	SHORT CHIP	0		
R473	1-216-864-11	SHORT CHIP	0		
R474	1-216-864-11	SHORT CHIP	0		
R475	1-216-864-11	SHORT CHIP	0		
R480	1-216-864-11	SHORT CHIP	0 (DX170/DX250)		
R481	1-216-833-11	METAL CHIP	10K	5%	1/10W
R482	1-216-833-11	METAL CHIP	10K	5%	1/10W
R483	1-216-833-11	METAL CHIP	10K	5%	1/10W
R484	1-216-833-11	METAL CHIP	10K	5%	1/10W
R487	1-216-833-11	METAL CHIP	10K	5%	1/10W
R488	1-216-833-11	METAL CHIP	10K	5%	1/10W
R489	1-216-833-11	METAL CHIP	10K	5%	1/10W
R490	1-216-833-11	METAL CHIP	10K	5%	1/10W
R491	1-216-833-11	METAL CHIP	10K	5%	1/10W
R492	1-216-833-11	METAL CHIP	10K	5%	1/10W
R493	1-216-833-11	METAL CHIP	10K	5%	1/10W
R501	1-216-809-11	METAL CHIP	100	5%	1/10W
R503	1-216-809-11	METAL CHIP	100	5%	1/10W
R514	1-216-821-11	METAL CHIP	1K	5%	1/10W
R550	1-216-864-11	SHORT CHIP	0		

MAIN

Ref. No.	Part No.	Description			Remark
R577	1-216-821-11	METAL CHIP	1K	5%	1/10W (DX150)
R577	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W (DX250)
R577	1-216-841-11	METAL CHIP	47K	5%	1/10W (DX170)
R585	1-216-809-11	METAL CHIP	100	5%	1/10W
R586	1-216-809-11	METAL CHIP	100	5%	1/10W
R587	1-216-809-11	METAL CHIP	100	5%	1/10W
R588	1-216-809-11	METAL CHIP	100	5%	1/10W
R589	1-216-821-11	METAL CHIP	1K	5%	1/10W
R590	1-216-809-11	METAL CHIP	100	5%	1/10W
R591	1-216-809-11	METAL CHIP	100	5%	1/10W
R592	1-216-833-11	METAL CHIP	10K	5%	1/10W
R593	1-216-833-11	METAL CHIP	10K	5%	1/10W
R594	1-216-809-11	METAL CHIP	100	5%	1/10W
R595	1-216-809-11	METAL CHIP	100	5%	1/10W
R596	1-216-821-11	METAL CHIP	1K	5%	1/10W (SP)
R596	1-216-833-11	METAL CHIP	10K	5%	1/10W (EA)
R596	1-216-835-11	METAL CHIP	15K	5%	1/10W (AUS)
R596	1-216-841-11	METAL CHIP	47K	5% (EXCEPT EA, SP, AUS)	1/10W
R601	1-216-809-11	METAL CHIP	100	5%	1/10W
R606	1-216-817-11	METAL CHIP	470	5%	1/10W
R607	1-216-817-11	METAL CHIP	470	5%	1/10W
R608	1-216-809-11	METAL CHIP	100	5%	1/10W
R609	1-216-864-11	SHORT CHIP	0		
R611	1-216-833-11	METAL CHIP	10K	5%	1/10W
R612	1-216-833-11	METAL CHIP	10K	5%	1/10W
R614	1-216-833-11	METAL CHIP	10K	5%	1/10W
R615	1-216-817-11	METAL CHIP	470	5%	1/10W
R616	1-216-833-11	METAL CHIP	10K	5%	1/10W
R617	1-216-864-11	SHORT CHIP	0		
R618	1-216-864-11	SHORT CHIP	0		
R620	1-216-809-11	METAL CHIP	100	5%	1/10W
R624	1-216-833-11	METAL CHIP	10K	5%	1/10W
R628	1-216-821-11	METAL CHIP	1K	5%	1/10W
R629	1-216-295-91	SHORT CHIP	0		
R636	1-216-864-11	SHORT CHIP	0		
R637	1-216-864-11	SHORT CHIP	0		
R638	1-216-809-11	METAL CHIP	100	5%	1/10W
R639	1-216-809-11	METAL CHIP	100	5%	1/10W
R649	1-216-809-11	METAL CHIP	100	5%	1/10W
R652	1-216-809-11	METAL CHIP	100	5%	1/10W
R653	1-216-809-11	METAL CHIP	100	5%	1/10W
R654	1-216-809-11	METAL CHIP	100	5%	1/10W
R655	1-216-809-11	METAL CHIP	100	5%	1/10W
R657	1-216-841-11	METAL CHIP	47K	5%	1/10W
R659	1-216-845-11	METAL CHIP	100K	5%	1/10W
R662	1-216-841-11	METAL CHIP	47K	5%	1/10W
R664	1-216-813-11	METAL CHIP	220	5%	1/10W
R665	1-216-813-11	METAL CHIP	220	5%	1/10W
R666	1-216-813-11	METAL CHIP	220	5%	1/10W
R670	1-216-809-11	METAL CHIP	100	5%	1/10W
R672	1-216-809-11	METAL CHIP	100	5%	1/10W
R673	1-216-833-11	METAL CHIP	10K	5%	1/10W
R674	1-216-864-11	SHORT CHIP	0		
R675	1-216-809-11	METAL CHIP	100	5%	1/10W
R676	1-216-833-11	METAL CHIP	10K	5%	1/10W
R678	1-216-864-11	SHORT CHIP	0		
R679	1-216-809-11	METAL CHIP	100	5%	1/10W
R680	1-216-809-11	METAL CHIP	100	5%	1/10W
R682	1-216-813-11	METAL CHIP	220	5%	1/10W
R683	1-216-809-11	METAL CHIP	100	5%	1/10W
R684	1-216-864-11	SHORT CHIP	0		
R686	1-216-809-11	METAL CHIP	100	5%	1/10W
R692	1-216-809-11	METAL CHIP	100	5%	1/10W
R693	1-216-809-11	METAL CHIP	100	5%	1/10W
R694	1-216-809-11	METAL CHIP	100	5%	1/10W
R695	1-216-809-11	METAL CHIP	100	5%	1/10W
R696	1-216-809-11	METAL CHIP	100	5%	1/10W
R697	1-216-809-11	METAL CHIP	100	5%	1/10W
R701	1-216-809-11	METAL CHIP	100	5%	1/10W
R702	1-216-833-11	METAL CHIP	10K	5%	1/10W
R703	1-216-821-11	METAL CHIP	1K	5%	1/10W
R704	1-216-821-11	METAL CHIP	1K	5%	1/10W
R705	1-216-833-11	METAL CHIP	10K	5%	1/10W
R706	1-216-809-11	METAL CHIP	100	5%	1/10W
R707	1-216-809-11	METAL CHIP	100	5%	1/10W
R709	1-216-833-11	METAL CHIP	10K	5%	1/10W
R710	1-216-864-11	SHORT CHIP	0		
R711	1-216-809-11	METAL CHIP	100	5%	1/10W
R712	1-216-864-11	SHORT CHIP	0		
R713	1-216-864-11	SHORT CHIP	0		
R714	1-216-864-11	SHORT CHIP	0		
R715	1-216-864-11	SHORT CHIP	0		
R716	1-216-864-11	SHORT CHIP	0		
R717	1-216-833-11	METAL CHIP	10K	5%	1/10W
R718	1-216-833-11	METAL CHIP	10K	5%	1/10W
R719	1-216-833-11	METAL CHIP	10K	5%	1/10W
R720	1-216-833-11	METAL CHIP	10K	5%	1/10W
R721	1-216-833-11	METAL CHIP	10K	5%	1/10W
R722	1-216-841-11	METAL CHIP	47K	5%	1/10W
R725	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R726	1-216-821-11	METAL CHIP	1K	5%	1/10W
R727	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R728	1-216-821-11	METAL CHIP	1K	5%	1/10W
R729	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R730	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R732	1-216-833-11	METAL CHIP	10K	5%	1/10W
R733	1-216-833-11	METAL CHIP	10K	5%	1/10W
R734	1-216-833-11	METAL CHIP	10K	5%	1/10W
R739	1-216-841-11	METAL CHIP	47K	5%	1/10W
R741	1-216-841-11	METAL CHIP	47K	5%	1/10W
R742	1-216-833-11	METAL CHIP	10K	5%	1/10W
R743	1-216-833-11	METAL CHIP	10K	5%	1/10W
R744	1-216-833-11	METAL CHIP	10K	5%	1/10W
R746	1-216-841-11	METAL CHIP	47K	5%	1/10W
R748	1-216-821-11	METAL CHIP	1K	5%	1/10W
R749	1-216-821-11	METAL CHIP	1K	5%	1/10W
R750	1-216-821-11	METAL CHIP	1K	5%	1/10W
R755	1-216-821-11	METAL CHIP	1K	5%	1/10W
R756	1-216-821-11	METAL CHIP	1K	5%	1/10W
R760	1-216-809-11	METAL CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R761	1-216-809-11	METAL CHIP	100	5%	1/10W
R762	1-216-809-11	METAL CHIP	100	5%	1/10W
R763	1-216-809-11	METAL CHIP	100	5%	1/10W
R764	1-216-809-11	METAL CHIP	100	5%	1/10W
R765	1-216-809-11	METAL CHIP	100	5%	1/10W
R774	1-216-821-11	METAL CHIP	1K	5%	1/10W
R775	1-216-841-11	METAL CHIP	47K	5%	1/10W
R789	1-216-809-11	METAL CHIP	100	5%	1/10W
R790	1-216-809-11	METAL CHIP	100	5%	1/10W
R791	1-216-809-11	METAL CHIP	100	5%	1/10W
R792	1-216-833-11	METAL CHIP	10K	5%	1/10W (MX, E32)
R792	1-216-837-11	METAL CHIP	22K	5%	1/10W (US, CND)
R792	1-216-841-11	METAL CHIP	47K	5%	1/10W (EA, AUS)
R793	1-216-841-11	METAL CHIP	47K	5%	1/10W (DX170/DX250)
⚠R901	1-219-237-11	SOLID	3.3M	20%	1/2W (E32, EA, SP, AUS)
⚠R902	1-219-237-11	SOLID	3.3M	20%S	1/2W (US, CND, MX)
⚠R903	1-215-926-00	METAL OXIDE	33K	5%	3W (US, CND, MX)
⚠R903	1-215-929-11	METAL OXIDE	100K	5%	3W (E32, EA, SP, AUS)
⚠R904	1-215-926-00	METAL OXIDE	33K	5%	3W (US, CND, MX)
⚠R904	1-215-929-11	METAL OXIDE	100K	5%	3W (E32, EA, SP, AUS)
⚠R905	1-216-797-11	METAL CHIP	10	5%	1/10W
⚠R906	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
⚠R907	1-216-833-11	METAL CHIP	10K	5%	1/10W
⚠R908	1-260-105-11	CARBON	3.3K	5%	1/2W
⚠R909	1-216-845-11	METAL CHIP	100K	5%	1/10W
⚠R910	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
⚠R911	1-216-813-11	METAL CHIP	220	5%	1/10W
⚠R912	1-216-361-61	METAL OXIDE	0.22	5%	2W (US, CND, MX)
⚠R912	1-216-363-00	METAL OXIDE	0.33	5%	2W (E32, EA, SP, AUS)
⚠R913	1-216-361-61	METAL OXIDE	0.22	5%	2W (US, CND, MX)
⚠R914	1-214-789-00	METAL	0.1	10%	5W (E32, EA, SP, AUS)
⚠R914	1-243-665-11	METAL	0.05	5%	5W (US, CND, MX)
⚠R918	1-216-864-11	SHORT CHIP	0		
⚠R919	1-216-836-11	METAL CHIP	18K	5%	1/10W
⚠R921	1-215-904-61	METAL OXIDE	100K	5%	2W
⚠R922	1-216-793-11	METAL CHIP	4.7	5%	1/10W
⚠R923	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
⚠R924	1-216-864-11	SHORT CHIP	0 (E32, EA, SP, AUS)		
⚠R925	1-216-797-11	METAL CHIP	10	5%	1/10W
⚠R926	1-216-855-11	METAL CHIP	680K	5%	1/10W
⚠R927	1-216-348-00	METAL OXIDE	0.82	5%	1W (US, CND)
⚠R927	1-216-349-00	METAL OXIDE	1	5%	1W (E32, EA, SP, AUS)
⚠R929	1-216-348-00	METAL OXIDE	0.82	5%	1W (MX)
⚠R930	1-216-864-11	SHORT CHIP	0 (E32, EA, SP, AUS)		
R931	1-218-869-11	METAL CHIP	8.2K	0.5%	1/10W
R932	1-218-883-11	METAL CHIP	33K	0.5%	1/10W
R933	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R934	1-216-821-11	METAL CHIP	1K	5%	1/10W
R935	1-216-821-11	METAL CHIP	1K	5%	1/10W
R936	1-216-853-11	METAL CHIP	470K	5%	1/10W
R937	1-216-833-11	METAL CHIP	10K	5%	1/10W
R938	1-216-821-11	METAL CHIP	1K	5%	1/10W
R939	1-218-859-11	METAL CHIP	3.3K	0.5%	1/10W
R940	1-216-833-11	METAL CHIP	10K	5%	1/10W
R941	1-216-864-11	SHORT CHIP	0		
R943	1-216-864-11	SHORT CHIP	0		
R946	1-216-811-11	METAL CHIP	150	5%	1/10W
R948	1-216-833-11	METAL CHIP	10K	5%	1/10W
R949	1-216-821-11	METAL CHIP	1K	5%	1/10W
R951	1-218-831-11	METAL CHIP	220	0.5%	1/10W
R952	1-218-855-11	METAL CHIP	2.2K	0.5%	1/10W
R953	1-218-861-11	METAL CHIP	3.9K	0.5%	1/10W
R954	1-216-837-11	METAL CHIP	22K	5%	1/10W
R955	1-216-817-11	METAL CHIP	470	5%	1/10W
R956	1-216-821-11	METAL CHIP	1K	5%	1/10W
R957	1-216-841-11	METAL CHIP	47K	5%	1/10W
R958	1-216-821-11	METAL CHIP	1K	5%	1/10W
R965	1-216-864-11	SHORT CHIP	0		
		< COMPOSITION CIRCUIT BLOCK >			
RB901	1-236-908-11	RES, CHIP NETWORK	10K (3216)		
RB902	1-236-908-11	RES, CHIP NETWORK	10K (3216)		
RB903	1-236-908-11	RES, CHIP NETWORK	10K (3216)		
RB904	1-236-908-11	RES, CHIP NETWORK	10K (3216)		
RB905	1-233-411-11	RES, CHIP NETWORK	220 (3216)		
RB906	1-233-411-11	RES, CHIP NETWORK	220 (3216)		
RB907	1-233-411-11	RES, CHIP NETWORK	220 (3216)		
RB908	1-233-411-11	RES, CHIP NETWORK	220 (3216)		
		< TRANSFORMER >			
⚠T901	1-443-649-11	CONVERTER TRANSFORMER (US, CND, MX)			
⚠T901	1-443-651-11	CONVERTER TRANSFORMER (E32, EA, SP, AUS)			
⚠T902	1-443-650-11	CONVERTER TRANSFORMER			
		< THERMISTOR >			
⚠TH901	1-805-841-21	THERMISTOR, NTC 3.0 (US, CND, MX)			
		< VARISTOR >			
⚠VDR901	1-805-482-11	VARISTOR (US, CND, MX)			
		< VIBRATOR >			
X450	1-795-660-21	QUARTZ CRYSTAL UNIT (49.152MHz)			
X502	1-795-058-21	VIBRATOR, CERAMIC (5MHz)			

****

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
		MOTOR BOARD			
		**********			
		< SWITCH >			
S761	1-786-704-11	SWITCH, LEVER (SUB TRAY OUT)			
**********					
		SENSOR BOARD			
		**********			
		< IC >			
IC751	8-759-989-76	IC RPR-359F			
**********					
		STBY BOARD			
		**********			
		< CONNECTOR >			
CN804	1-506-481-11	PIN, CONNECTOR 2P			
		< SWITCH >			
S801	1-762-875-21	SWITCH, KEYBOARD (I/⏻)			
**********					
		SW (1) BOARD			
		**********			
		< SWITCH >			
S721	1-786-084-11	SWITCH, DETECTION (MAIN TRAY IN/OUT)			
**********					
		SW (2) BOARD			
		**********			
		< SWITCH >			
S731	1-786-382-11	SWITCH, PUSH (1 KEY) (SUB TRAY IN)			
**********					
	A-4750-232-A	TRANSLATION BOARD,COMPLETE			
		**********			
		< CAPACITOR >			
C701	1-126-786-11	ELECT	47uF	20%	16V
C702	1-126-791-11	ELECT	10uF	20%	35V
C761	1-162-306-11	CERAMIC	0.01uF	20%	16V
C762	1-162-306-11	CERAMIC	0.01uF	20%	16V
		< CONNECTOR >			
CN701	1-779-558-21	CONNECTOR, FFC (LIF (NON-ZIF)) 21P			
		< DIODE >			
D701	8-719-921-40	DIODE MTZJ-4.7C			
D711	8-719-982-10	DIODE MTZJ-4.3A			
		< IC >			
IC701	8-759-598-69	IC BA6956AN			
IC711	8-759-598-69	IC BA6956AN			

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q751	8-729-119-78	TRANSISTOR 2SC2785-HFE			
		< RESISTOR >			
R701	1-249-415-11	CARBON	680	5%	1/4W
R702	1-247-807-31	CARBON	100	5%	1/4W
R711	1-249-415-11	CARBON	680	5%	1/4W
R712	1-247-807-31	CARBON	100	5%	1/4W
R751	1-247-806-11	CARBON	91	5%	1/4W
R752	1-249-429-11	CARBON	10K	5%	1/4W
R753	1-249-429-11	CARBON	10K	5%	1/4W
R754	1-249-430-11	CARBON	12K	5%	1/4W
R755	1-249-429-11	CARBON	10K	5%	1/4W
**********					
		MISCELLANEOUS			
		**********			
4	1-828-962-11	WIRE (FLAT TYPE) (11 CORE)			
6	1-787-331-11	FAN, D.C.			
62	1-828-363-11	WIRE (FLAT TYPE) (19 CORE)			
63	1-828-957-11	WIRE (FLAT TYPE) (9 CORE)			
102	1-829-927-11	WIRE (FLAT TYPE) (11CORE)			
⚠104	1-696-847-22	CORD, POWER (AUS)			
⚠104	1-783-531-91	CORD, POWER (US,CND)			
⚠104	1-824-090-11	CORD, POWER (MX)			
⚠104	1-828-528-11	CORD, POWER (E32, EA, SP)			
109	1-828-382-11	WIRE (FLAT TYPE) (23 CORE)			
110	1-828-369-11	WIRE (FLAT TYPE) (21 CORE)			
111	1-828-323-11	WIRE (FLAT TYPE) (11 CORE)			
112	1-830-463-11	WIRE (FLAT TYPE) (13 CORE)			
113	1-830-459-11	WIRE (FLAT TYPE) (7 CORE)			
⚠302	8-820-291-02	OPTICAL PICK-UP (KHM-310CAB/C2RP)			
305	1-830-551-11	WIRE (FLAT TYPE) (24 CORE)			
⚠F901	1-532-506-32	FUSE (6.3A/250V) (E32, EA, SP, AUS)			
⚠F901	1-576-537-12	FUSE, GLASS TUBE (DIA.5) (8A/125V)			(US,CND,MX)
M761	A-4713-174-A	MOTOR (81) ASSY (LD/ST MOTOR)			
M762	A-4713-174-A	MOTOR (81) ASSY (BU U/D MOTOR)			
S771	1-478-552-11	ENCODER, ROTARY (MD)			
S781	1-478-551-11	ENCODER, ROTARY (ST U/D ENCODER)			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

HCD-DX150/DX170/ DX250

SONY

SERVICE MANUAL

Ver. 1.2 2005.05

US Model
Canadian Model
HCD-DX150/DX170/DX250
E Model
Australian Model
HCD-DX150

SUPPLEMENT-1

Subject: Board changed to DMB11 board from DMB10 board

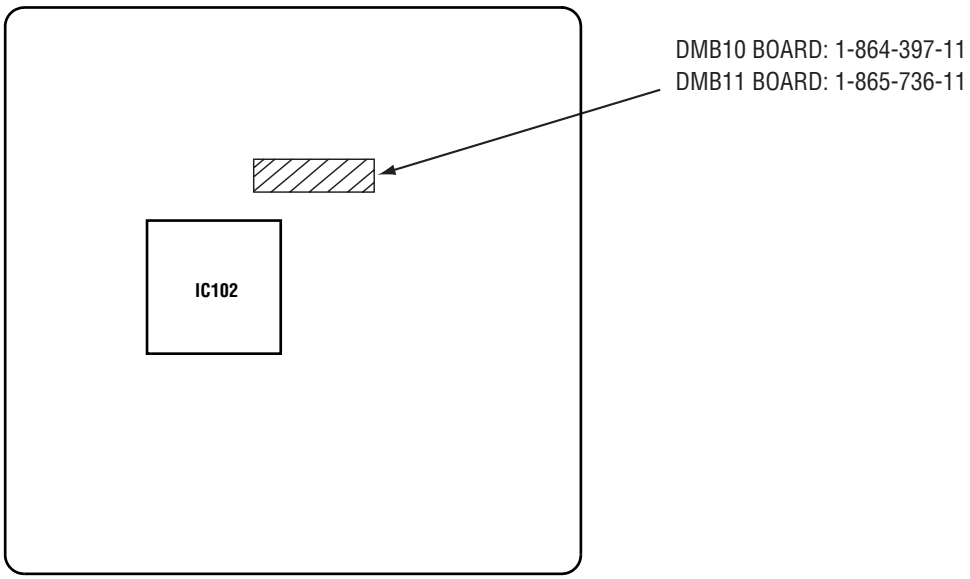
Please refer to SCHMATIC DIAGRAM and ELECTRICAL PARTS LIST of DMB 10 board for SCHMATIC DIAGRAM and ELECTRICAL PARTS LIST of DMB 11 board.

9-879-398-81

Board changed to DMB11 board from DMB10 board.
It has any difference between DMB11 board and DMB10 board.
This supplement-1 describes the difference in the two boards.
Refer to original service manual (9-879-398-0□) for other information.

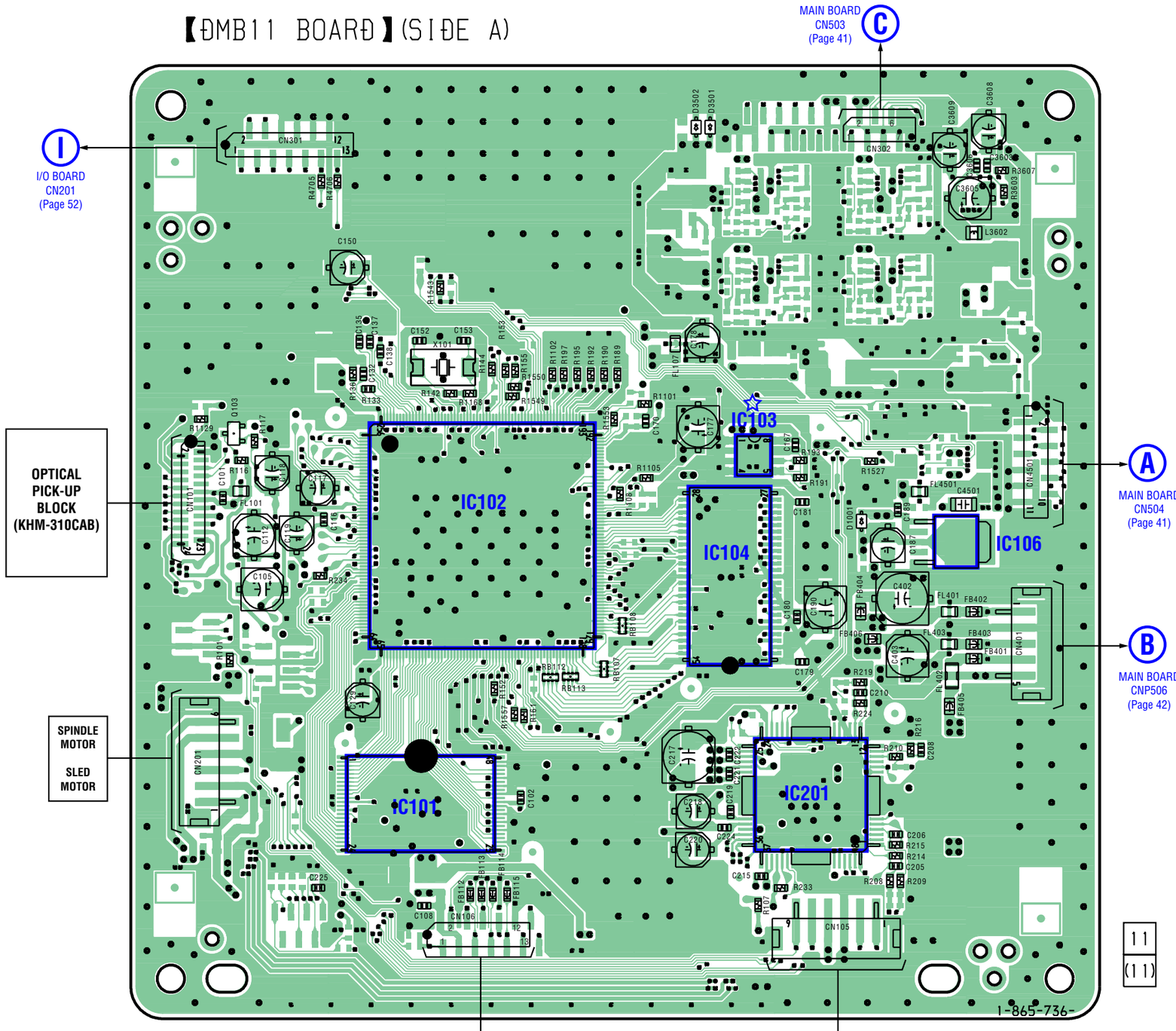
• **How to distingnish**

Location of parts number on changed board.



PRINTED WIRING BOARD – DMB11 BOARD (SIDE A) – :Uses unleaded solder.

【DMB11 BOARD】(SIDE A)



☆ IC103 is a written in and settled EEPROM. Supply with a single article has not been carried out. In case you exchange by DMB11 board, please put on IC103 currently used with the model again.

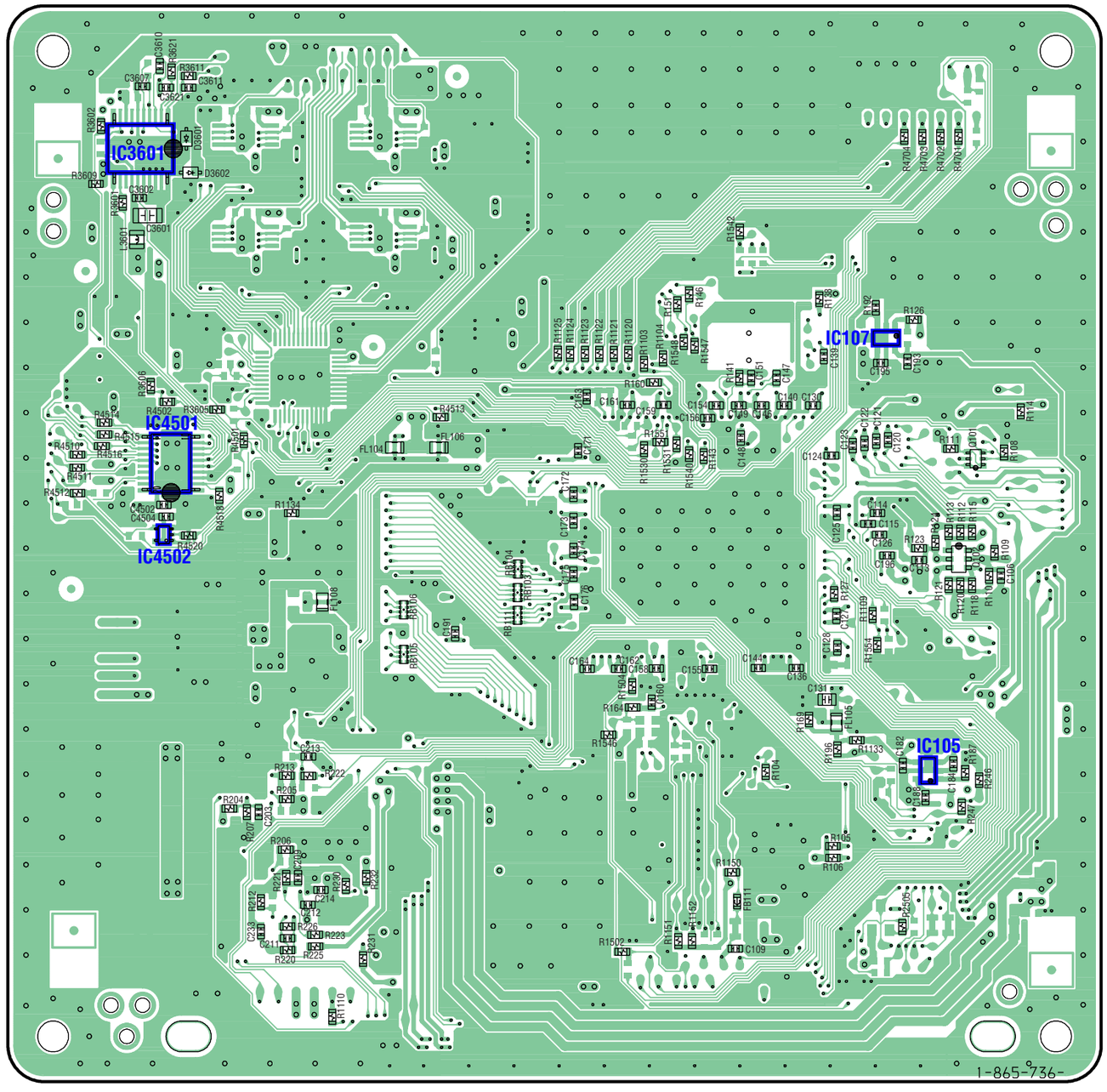
- **Semiconductor Location**

Ref. No.	Location
D1001	E-7
D3501	B-6
D3502	B-6
IC101	G-4
IC102	E-4
IC103	D-6
IC104	E-6
IC106	E-8
IC201	G-7
Q103	D-3

11
(11)

PRINTED WIRING BOARD – DMB11 BOARD (SIDE B) – :Uses unleaded solder.

【ÐMB11 BOARÐ】(SIÐE B)



- **Semiconductor Location**

Ref. No.	Location
D3601	B-3
D3602	C-3
IC105	F-8
IC107	D-7
IC3601	B-3
IC4501	D-3
IC4502	E-3
Q101	D-8
Q102	E-8

MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2005.02	New
1.1	2005.03	Addition of Service Note for DMB10 board exchange (SPM-05034)
1.2	2005.05	Addition of Ref.No.64 and Ref.No.65 SUPPLEMENT-1 : Board changed to DMB11 board from DMB10 board (SPM-05034)
1.3	2005.11	DVD section electrical adjustment alteration (SPM-05077)
1.4	2006.03	Addition of Parts No. for Ref. No. 114 and 115 (SPM-06016)
1.5	2006.10	Addition of Ref. No. 305 (SPM-06058)

SS-DS14/DS15

SERVICE MANUAL

Ver. 1.0 2005.03

US Model
Canadian Model

- SS-DS14 is the speaker section in DAV-DX250.
  SS-DS15 is the speaker section in DAV-DX170.
- SS-DS14 and SS-DS15 are composed of following models.
  As service manuals are issued for each component model, please refer to them.

COMPONENT MODEL NAME

	SS-DS14	SS-DS15
FRONT SPEAKER	SS-TS41	SS-TS31
SURROUND SPEAKER	SS-TS31B	
CENTER SPEAKER	SS-CT31	
SUB SPEAKER	SS-WS32	

SPEAKER SYSTEM

9-879-569-01
2005C16-1
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Audio Group
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REVISION HISTORY

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Ver.	Date	Description of Revision
1.0	2005.03	New

SS-TS31/TS31B

SERVICE MANUAL

Ver. 1.1 2005.09

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model

- SS-TS31 is the speaker section in DAR-RD100, DAV-DX150, DAV-DX170, DAV-DZ100, DAV-DZ100K and HT-RD150.
- SS-TS31B is the speaker section in DAV-DX150, DAV-DX170, DAV-DX250, DAV-DZ100, DAV-DZ100K and HT-RD150.

SS-TS31
(Photo : R-ch)

SPECIFICATIONS

Front (SS-TS31)

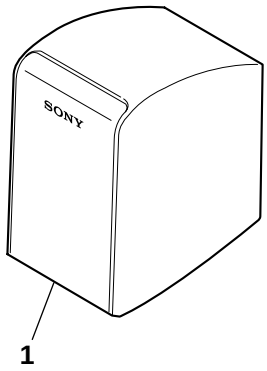
Speaker system	Bass reflex
Speaker units	65 mm (2 5/8 inches) dia. cone type,
Rated Impedance	2.7 ohms
Dimensions (approx.)	90 × 132 × 107 mm (3 5/8 × 5 1/4 × 4 1/4 inches) (w/h/d)
Mass (approx.)	0.6 kg (1 lb 6 oz)

Surround (SS-TS31B)

Speaker system	Bass reflex
Speaker units	65 mm (2 5/8 inches) dia. cone type,
Rated Impedance	2.7 ohms
Dimensions (approx.)	90 × 132 × 107 mm (3 5/8 × 5 1/4 × 4 1/4 inches) (w/h/d)
Mass (approx.)	0.5 kg (1 lb 2 oz)

Design and specifications are subject to change without notice.

EXPLODED VIEWS



Ref. No.	Part No.	Description
1	A-1103-630-A	OVERALL ASSY (SS-TS31)
1	A-1103-713-A	OVERALL ASSY (SS-TS31B)

SPEAKER SYSTEM

9-879-396-02
2005I16-1
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REVISION HISTORY

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Ver.	Date	Description of Revision
1.0	2005.02	New
1.1	2005.09	Addition of AEP and UK models

SS-CT31

SERVICE MANUAL

Ver. 1.1 2005.09

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model

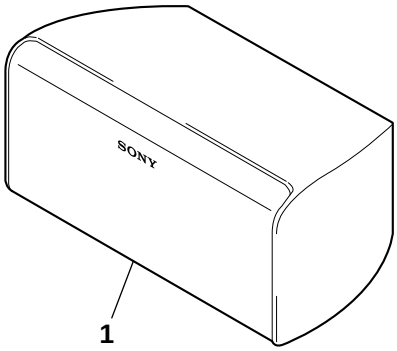
SS-CT31 is the speaker section in DAV-DX150, DAV-DX170, DAV-DX250, DAV-DZ100 and DAV-DZ100K.

SPECIFICATIONS

Speaker system	Bass reflex
Speaker units	65 mm (2 5/8 inches) dia. cone type
Rated impedance	2.7 ohms
Dimensions (approx.)	200 × 92 × 107 mm (7 7/8 × 3 5/8 × 4 1/4 inches) (w/h/d)
Mass	0.7 kg (1 lb 9oz)

Design and specifications are subject to change without notice.

EXPLODED VIEWS



Ref. No.	Part No.	Description
1	A-1103-632-A	OVERALL ASSY

SPEAKER SYSTEM

9-879-400-02
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REVISION HISTORY

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Ver.	Date	Description of Revision
1.0	2005.02	New
1.1	2005.09	Addition of AEP and UK models

SS-WS32

SERVICE MANUAL

US Model
Canadian Model

Ver. 1.1 2005.09

SS-WS32 is the subwoofer in DAV-DX170 and DAV-DX250.

SPECIFICATIONS

Speaker system	1 way, magnetically shielded
Speaker unit	160 min (6 1/8 inches) dia. cone type
Enclosure type	Bass reflex
Rated impedance	1.3 ohms
Dimensions (approx.)	200 × 312 × 321 mm (including grille net) (7 7/8 × 12 3/8 × 12 3/4 inches) (w/h/d)
Mass (approx.)	5.0 kg (11 lb 1 oz)

Design and specifications are subject to change without notice.

SUB WOOFER

9-879-570-02
2005I16-1
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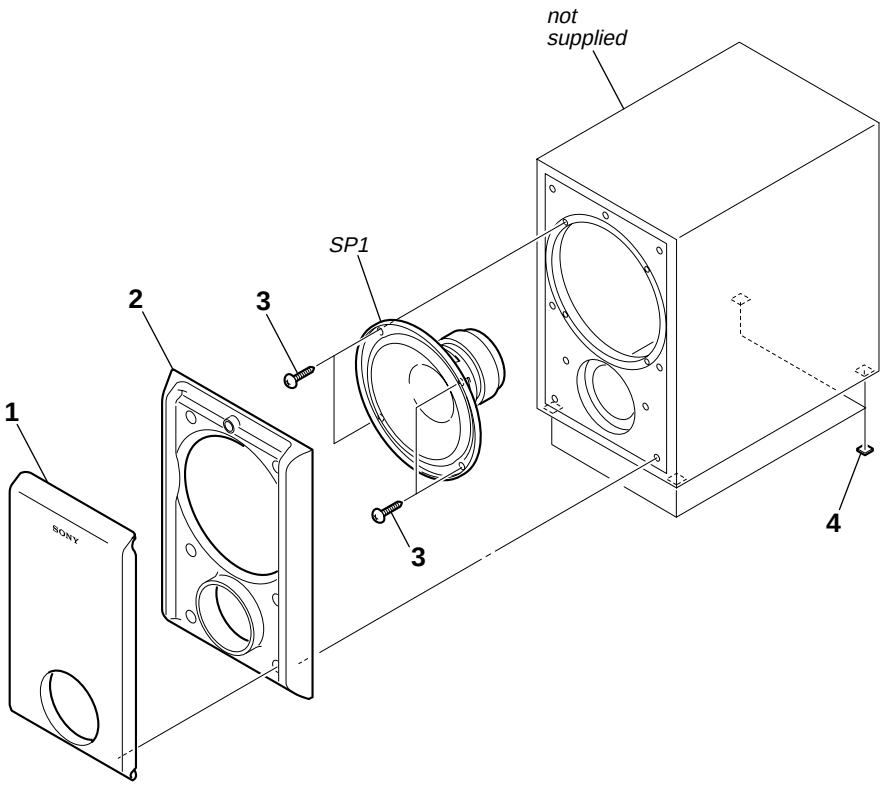
EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- XX and -X mean standardized parts, so they may have some difference from the original one.



Ref. No.	Part No.	Description	Remark
1	X-2050-610-1	FRAME ASSY, GRILLE	
2	2-587-969-01	PANEL, FRONT	
3	4-874-614-52	SCREW (1)(3.5X20), TAPPING	
4	4-249-156-01	FOOT (FRONT)	
SP1	1-826-117-11	LOUD SPEAKER (16cm)	

MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2005.03	New
1.1	2005.09	Addition of the system name (DAV-DX170) for use